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UNITED STATES DISTRICT COURT
EASTERN DISTRICT OF LOUISIANA

IN RE: OIL SPILL BY THE OIL RIG * Docket 10-MD-2179
DEEPWATER HORIZON IN THE *
GULF OF MEXICO ON APRIL 20, 2010 * Section J

Applies to: * New Orleans, Louisiana
*
Docket 10-CV-02771, * February 25, 2013
IN RE: THE COMPLAINT AND *
PETITION OF TRITON ASSET *
LEASING GmbH, et al *

Docket 10-CV-4536, *
UNITED STATES OF AMERICA v. *
BP EXPLORATION & PRODUCTION, *
INC., et al *

* * * * *

DAY 1, AFTERNOON SESSION
TRANSCRIPT OF NONJURY TRIAL
BEFORE THE HONORABLE CARL J. BARBIER
UNITED STATES DISTRICT JUDGE

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AFTERNOON SESSION

(February 25, 2013)

THE DEPUTY CLERK: All rise.

THE COURT: Please be seated, everyone.

I think Halliburton is up next. Mr. Godwin.

MR. GODWIN: Yes, Your Honor. Thank you very much.

Your Honor, I am Don Godwin on behalf of Halliburton. And I, as well as the other lawyers who have spoken to you today, would like to express the appreciation of myself, my team, and my client for all that you, Judge Shushan, and your respective staffs have done to bring this case to this point to allow all of us to come in here and share with you our thoughts and what ultimately, over the next several weeks or months, will be the evidence from the witness stand in helping you decide or come to a decision or series of decisions about what happened leading up to that fatal day of April 20, 2010.

Your Honor, this case is about a loss of well control and BP's attempts to blame Halliburton and others for BP's misconduct. Mr. Mike Underhill said it very succinctly when he said, "BP blaming Halliburton is disingenuous." You've heard other lawyers say, including the Transocean lawyer -- Mr. Brad Brian said that BP is attempting to blame others for its misconduct.

Judge, BP and Transocean failed to maintain well control. Some examples of that are BP failed to confirm zonal

01:36 1 isolation. Cement is never a barrier until tested. You will
01:36 2 recall Mr. Roy saying that the cement should have provided a
01:37 3 barrier to flow. Obviously you have to test it before you can
01:37 4 rely upon it to be a barrier. You will hear witnesses say that
01:37 5 as I go through my opening remarks here, Your Honor.

01:37 6 BP and Transocean misinterpreted the negative
01:37 7 tests. There were two of them, Your Honor. BP and Transocean
01:37 8 displaced the well, causing hydrocarbons to enter a breach in
01:37 9 the casing. Transocean, Your Honor, failed to timely or
01:37 10 properly respond to the well control event. BP failed to seal
01:37 11 the well when it was activated, although it was activated
01:37 12 untimely. Transocean routed hydrocarbons to ignition sources
01:37 13 such as the engine room and other places where hydrocarbons
01:37 14 could be ignited on the rig rather than overboard, as they
01:37 15 should have been.

01:37 16 BP's and Transocean's actions were superseding
01:37 17 causes of the blowout. You've heard Mr. Underhill say that had
01:37 18 the negative pressure test been correctly interpreted, the
01:37 19 blowout would not have occurred, we would not be here today.
01:38 20 You heard Mr. Brad Brian for Transocean say basically the same
01:38 21 thing.

01:38 22 Your Honor, as the evidence will show, BP's
01:38 23 drilling expert, Dr. J.J. Azar, and a vice president of the
01:38 24 company, Mr. Pat O'Bryan, had testified in their depositions
01:38 25 that the -- had the negative tests been correctly interpreted,

01:38 1 there would have been no blowout. The loss of lives and
01:38 2 millions of barrels of oil would not have been released into
01:38 3 the Gulf and we would not be here today.

01:38 4 BP's and the PSC's cement arguments are simply
01:38 5 wrong, Your Honor, and we will show you that in the coming
01:38 6 weeks and months in the testimony. The cement slurry design by
01:38 7 Jesse Gagliano was a good design. Let me say that again, Your
01:38 8 Honor: The cement slurry design was a good design.

01:38 9 As experts representing other parties in this
01:38 10 litigation have testified in their depositions, the additives
01:39 11 that Mr. Gagliano, Jesse, included in the design were
01:39 12 appropriate and acceptable practice by experts in the oil and
01:39 13 gas industry. The red herring that BP is attempting to use to
01:39 14 criticize the cement design is the inclusion of D-Air 3000 in
01:39 15 the slurry mix.

01:39 16 As the evidence will show, Your Honor, experts
01:39 17 for other parties, in addition to Halliburton's experts, have
01:39 18 said that the inclusion was entirely acceptable as long as the
01:39 19 appropriate amount of surfactant -- or what is otherwise known
01:39 20 as a foamer -- was included. That was done here.

01:39 21 Lastly, Your Honor, Halliburton's mud log and
01:39 22 services were performed correctly by Mr. Joe Keith. BP is
01:39 23 attempting to pass the blame off and say that Joe Keith missed
01:39 24 evidence of a kick. That simply did not occur, Your Honor.
01:39 25 You will hear Mr. Keith come to the stand and testify what he

01:39 1 saw that evening and what he did not see. And it was corrected
01:39 2 in terms of the length of the time that Mr. Keith was on a
01:40 3 break. It started out as 30 minutes; it was a misstatement.
01:40 4 Then it was 10. It was actually between eight and 10 minutes,
01:40 5 is what Mr. Keith said, that he did notify the drilling floor
01:40 6 that he was going to go to the bathroom, take a smoke break,
01:40 7 and he'd be back. And he was back within eight to 10 minutes.
01:40 8 You will hear that explained on the stand.

01:40 9 Your Honor, BP failed to confirm zonal isolation
01:40 10 by performing what is known as a cement bond log. As you know,
01:40 11 Your Honor, a cement bond log evaluates bonding, presence of
01:40 12 channeling, and the top of cement. It can also help to confirm
01:40 13 whether a cement job is placed in the annulus, where it's
01:40 14 intended to be.

01:40 15 BP's own best practice requires that a proven
01:40 16 cement evaluation technique where top of cement is designed to
01:40 17 be less than 1,000 feet above the highest hydrocarbon zone.
01:40 18 Rather than incur the time, which was estimated to 12 to
01:40 19 16 hours, and the expense, which is estimated to be \$128,000,
01:41 20 to run a CBL, BP decided not to run it and dismissed
01:41 21 Schlumberger's crew that was there on the rig for that very
01:41 22 purpose. They had been sent out there. They were there.
01:41 23 Money had been paid to have them there. And rather than spend
01:41 24 the time on a well that BP was already 30 days overdue on --
01:41 25 30 days overdue and about \$50 million over budget -- they sent

01:41 1 the Schlumberger crew home without running the cement bond log.

01:41 2 Judge, a cement bond log could have determined
01:41 3 the top of cement. And if an issue was discovered, the cement
01:41 4 could have been remediated in what is known as a "squeeze job"
01:41 5 after the negative pressure test.

01:41 6 Judge, squeeze jobs are done at other intervals
01:41 7 and other locations within this very well. Squeeze jobs are
01:41 8 done regularly in the industry where there is the determination
01:41 9 made that there is something wrong with a cement job. There
01:41 10 was no showing there was anything wrong, but if there had been,
01:41 11 it could have been done, it could have been fixed, and it could
01:41 12 have been done quickly. But BP was saving time and money, time
01:41 13 and money by not doing it. And it proved to be a mistake that
01:42 14 we are all having to live with as we are here today.

01:42 15 Your Honor, BP misinterpreted the negative
01:42 16 pressure test. They have acknowledged it in Bly report. They
01:42 17 have acknowledged it in their guilty plea to the Department of
01:42 18 Justice.

01:42 19 The purpose of a negative test, Your Honor, is
01:42 20 to intentionally underbalance the hydrostatic pressure in order
01:42 21 to test the integrity of the barriers in the well to
01:42 22 hydrocarbon flow. One of those barriers is intended to be the
01:42 23 cement, but you can't rely upon it until you test it.

01:42 24 Judge, the negative pressure test is a
01:42 25 safety-critical test. Yet BP had no written procedure for it

01:42 1 to be performed on the Macondo well. There was no agreement --
01:42 2 if you can imagine it, there was no agreement, the evidence
01:42 3 will show, between BP's drilling engineers -- Mr. Hafle,
01:42 4 Mr. Cocalles, and Mr. Morel -- and the two well-site leaders --
01:42 5 Bob Kaluza and Don Vidrine -- as to how the negative test would
01:42 6 be performed.

01:42 7 As the evidence will show, Judge, they were
01:43 8 making it up as they went, which set in motion a series of
01:43 9 events that resulted in the blowout, the loss of lives, very,
01:43 10 very sadly, countless injuries to others on the rig, and
01:43 11 millions of barrels of oil into the Gulf, and the damages that
01:43 12 bring us all here today.

01:43 13 Judge, BP performed at least two negative tests.
01:43 14 There was talk about there might have been a third one, but we
01:43 15 know of at least two, and they got it wrong both times. Not
01:43 16 one time but both times. BP ultimately accepted a zero-psi
01:43 17 reading on the kill line while ignoring a 1400-psi reading on
01:43 18 the drill pipe. You have heard about that today. That's
01:43 19 unacceptable. Accepted a "bladder effect," something never
01:43 20 been heard of before by others at BP or with Transocean, in
01:43 21 order to justify that the negative test was a good test. BP
01:43 22 has admitted, in the Bly report and its guilty plea, that it
01:43 23 misinterpreted this safety-critical negative test.

01:43 24 Judge, the bladder effect simply does not exist.
01:44 25 There are a number of folks whose names I have listed there on

01:44 1 the screen. I have not pulled up here today. They were all
01:44 2 deposed in the series of over 300 depositions in this case.
01:44 3 Jonathan Sprague, BP drilling engineer, manager for
01:44 4 exploration, appraisal, development and production; Mr. Murray
01:44 5 Sepulvado, a BP well-site leader of many, many years; Ronnie
01:44 6 Sepulvado, a BP well-site leader.

01:44 7 Do we need a break, Your Honor?

01:44 8 **THE COURT:** Excuse me one second. Another technical
01:44 9 problem in one of our overflow rooms. I hope we are getting
01:44 10 those all out of the way today.

01:44 11 I'm sorry. I apologize. Go ahead.

01:44 12 **MR. GODWIN:** Another one who has said in his
01:44 13 deposition, Your Honor, that he never heard of this so-called
01:45 14 bladder effect, Mr. John Guide. He was the actual BP wells
01:45 15 team leader on this very Macondo well. He never heard of a
01:45 16 bladder effect.

01:45 17 Phillip Earl Lee; Dr. J.J. Azar, BP's drilling
01:45 18 expert; and others, Your Honor, all testified in their
01:45 19 depositions they never heard of this bladder effect that the
01:45 20 well-site leaders relied upon in determining that they had a
01:45 21 good negative test when they had differing readings on both the
01:45 22 kill line and the drill pipe.

01:45 23 Judge, the bladder effect doesn't exist.
01:45 24 Mr. Bob Kaluza, who has since taken the Fifth Amendment --
01:45 25 refuses to testify in the case -- he wrote on April 25, five

01:45 1 days after the blowout, trying to explain what happened -- he
01:45 2 was one of the two well-site leaders. He said: "Please
01:45 3 consider this" -- and he has copied Don Vidrine.

01:45 4 "Please consider this suggestion in the analysis
01:45 5 about how this happened. I believe there's a bladder effect on
01:45 6 the mud below the annular preventer, as we discussed."

01:45 7 We deposed Mr. Pat O'Bryan, Your Honor, who was
01:46 8 the vice president of the entire Gulf of Mexico drilling and
01:46 9 completions part of BP. And with regard to the questions about
01:46 10 the bladder effect, he wrote an e-mail, and 560 times he logged
01:46 11 in the question mark. He was asked: "Why did you do that?
01:46 12 Why did you do it that many times?"

01:46 13 He said: "I was expressing my frustration with
01:46 14 anybody having relied upon something as silly as a bladder
01:46 15 effect to justify that the negative test was good when it was
01:46 16 not."

01:46 17 Judge, from the rig floor to the CEO's office in
01:46 18 London, BP knew or has since acknowledged the negative test was
01:46 19 misinterpreted. Tony Hayward testified to it in London.
01:46 20 Judge Shushan was there. Mark Bly, who was appointed to do the
01:46 21 Bly investigation, he has acknowledged it in his Bly report.
01:46 22 Mr. Kent Corser, one of the lead investigators, determined it
01:46 23 as well. A drilling manager and engineering authority there
01:47 24 with BP, Mr. Pat O'Bryan, you see his name, Your Honor. And,
01:47 25 of course, Don Vidrine, well-site leader, Bob Kaluza, both have

01:47 1 taken the Fifth. We are not able to find out what they know
01:47 2 about the subject, other than what Mr. Kaluza wrote in an
01:47 3 e-mail. And Mr. Mark Hafle, one of the three engineers working
01:47 4 with Jesse Gagliano in the cement slurry design, he has taken
01:47 5 the Fifth, as has Mr. Brian Morel, the one that Jesse worked
01:47 6 with most often -- Jesse Gagliano worked with him most often.
01:47 7 We have not been able to ask Mr. Morel what he knew about the
01:47 8 misinterpretation of the negative pressure test.

01:47 9 Judge, BP has admitted 11 felony counts. BP
01:47 10 admits that its supervision and interpretation of the negative
01:47 11 test were negligent and a proximate cause of the blowout and
01:47 12 loss of lives. Quoting in part from that guilty plea,
01:47 13 Your Honor, said: "On or about April 20, 2010, between
01:47 14 approximately 5:00 and 8:00 p.m. Central daylight time, the
01:48 15 negative pressure test performed on the Macondo well provided
01:48 16 multiple indications that the wellbore was not secure. BP's
01:48 17 well-site leaders negligently supervised the negative pressure
01:48 18 test during this time, failed to alert engineers on the shore
01:48 19 of these indications, and along with others, ultimately deemed
01:48 20 the negative pressure test a success. All in violation of
01:48 21 applicable duty of care. The negligent conduct of BP's
01:48 22 well-site leaders is attributable to BP."

01:48 23 Your Honor, the proper interpretation of the
01:48 24 negative pressure test was asked of one of BP's experts,
01:48 25 Dr. J.J. Azar, who testified here to some questions asked about

01:48 1 that subject.

01:48 2 "QUESTION: The negative test had been correctly
01:48 3 interpreted by BP and Transocean, and a determination was
01:48 4 made that the cement job was not a good job. Remediation
01:48 5 work could have been done that would have resulted in this
01:49 6 blowout not occurring. Would you agree with that?

01:49 7 "ANSWER: I agree with that, sir.

01:49 8 "QUESTION: And if, in fact, that remediation work
01:49 9 was done and the blowout didn't occur, we wouldn't be
01:49 10 sitting here today and 11 men would not have lost their
01:49 11 lives. Would you also -- would you also agree with that?

01:49 12 "ANSWER: I agree with that."

01:49 13 Your Honor, in addition to Dr. Azar, Mr. Pat
01:49 14 O'Bryan -- as I said, BP's vice president of drilling and
01:49 15 completions in the Gulf of Mexico -- was also asked a series of
01:49 16 questions about this same subject.

01:49 17 "QUESTION: Had the negative test been correctly
01:49 18 interpreted, there would not have been a blowout, would
01:49 19 there?

01:49 20 "ANSWER: That is correct. Well integrity would have
01:49 21 been established."

01:49 22 Well integrity would have been established.

01:49 23 Your Honor, the displacement of the riser
01:49 24 resulted in hydrocarbon flow through a breach in the casing.
01:49 25 Your Honor, the casing was set in compression, inducing

01:50 1 buckling and an eventual breach below the flow collar. As you
01:50 2 have heard testimony -- not testimony, but you have heard
01:50 3 statements and seen writings before, this occurred after nine
01:50 4 attempts to convert the flow collar.

01:50 5 Judge, the cement job was pumped through a
01:50 6 breach casing, resulting in lack of zonal isolation. It was
01:50 7 BP's obligation to ensure that the cement was placed so that
01:50 8 you had zonal isolation. They did not do that, Your Honor.
01:50 9 Relying on BP's misinterpretation of the negative test, BP and
01:50 10 Transocean displaced the heavier weight mud, Your Honor, out of
01:50 11 the riser with lighter seawater, allowing hydrocarbons to
01:50 12 escape through the breach and up through the rig floor, through
01:50 13 a BOP that was not timely and correctly activated.

01:50 14 Judge, we have given you here a still shot, a
01:50 15 screenshot, if you will, of casing and compression inducing
01:50 16 buckling. You can see it here and what it would look like.
01:50 17 Obviously, this is not to scale. Later in the trial, depending
01:51 18 upon the ruling from Your Honor about the admissibility of the
01:51 19 entire animation, we will attempt to show it to you at that
01:51 20 time, but this shows you here what the casing would look like
01:51 21 that is in compression and induced buckling.

01:51 22 Your Honor, the next slide shows the casing
01:51 23 breach for hydrocarbon flow. You will see at the bottom down
01:51 24 here where the casing has been put in compression, has buckled.
01:51 25 There's a breach in it, and you see hydrocarbon flow coming in

01:51 1 through hydrocarbon zones that were not isolated.

01:51 2 Judge, Transocean, we believe the evidence will
01:51 3 show, failed to timely and appropriately respond to the well
01:51 4 control event; failed to properly utilize the blowout
01:51 5 preventer; Transocean did not timely shut in the variable bore
01:51 6 rams; failed to manually activate the casing shear rams or the
01:51 7 blind shear rams. Transocean, we believe the evidence will
01:51 8 show, Your Honor, failed to route hydrocarbons overboard;
01:51 9 instead, allowing them to be routed near ignition sources,
01:52 10 which is absolutely prohibited in deepwater drilling.

01:52 11 Transocean failed, we believe, Your Honor, to
01:52 12 timely activate the emergency disconnect sequence and likewise
01:52 13 failed to maintain the AMF/deadman system, preventing
01:52 14 activation of blind shear rams.

01:52 15 Judge, Transocean has a number of manuals that
01:52 16 deal with what are you supposed to do, what are the drilling
01:52 17 folks supposed to do there on the rig when they see something
01:52 18 unusual going on downhole, when there's evidence of something
01:52 19 that they might think of as a kick. The American Petroleum
01:52 20 Institute also has manuals and guidelines on this very subject.
01:52 21 I'm not going to go into all of them. You can see four up here
01:52 22 on the screen, Judge, but I would like to go into a couple of
01:52 23 them very briefly.

01:52 24 The *Transocean Well Control Handbook*,
01:52 25 Your Honor, at the chapter dealing with actions taken upon

01:52 1 taking a kick, containment as early as possible, says: "When a
01:53 2 well kicks, it should be shut in within the shortest possible
01:53 3 time. By taking action quickly, the amount of formation fluid
01:53 4 that enters the wellbore and the amount of drilling fluid
01:53 5 expelled from the annulus is minimized.

01:53 6 "It is the driller's or the person performing
01:53 7 the driller's function responsibility to shut in the well as
01:53 8 quickly as possible if a kick is detected."

01:53 9 Next, Your Honor, the American Petroleum
01:53 10 Institute, API, has a recommended practice for well control
01:53 11 operations. Under the paragraph dealing with well close-in
01:53 12 proceedings, it says, in part: "When a kick is detected, the
01:53 13 well should be closed in as quickly as possible to minimize
01:53 14 influx volume."

01:53 15 You heard Mr. Brian say earlier, if BP had shut
01:53 16 down the well -- shut in the well -- if BP had shut down the
01:53 17 job, shut in the well, we would not be here today. We say that
01:54 18 applies to Transocean as well. The API and Transocean's
01:54 19 manuals both say it: If you detect a kick, you must shut in
01:54 20 first and then investigate, not the other way around.

01:54 21 Judge, there are some examples that I have here
01:54 22 on the screen of a number of gentlemen who gave depositions in
01:54 23 this litigation that talked about this very subject of the
01:54 24 requirement to shut in when a determination is made that
01:54 25 something is awry downhole and then investigate. Let's see

01:54 1 what Mr. Micah Burgess, a TO driller, said about this subject.

01:54 2 "QUESTION: If you did suspect a kick, as the
01:54 3 driller, you would shut in the well as quickly as
01:54 4 possible?

01:54 5 "ANSWER: Me myself, I would -- if I suspected a
01:54 6 kick, I would shut the well in. That's what I would --"

01:54 7 "I would shut the well in."

01:54 8 They saw parts earlier of Mr. Randy Ezell's
01:55 9 deposition testimony. Let's see what he said about this
01:55 10 subject of the requirement to shut in the well and then
01:55 11 investigate.

01:55 12 "QUESTION: Prior to 2010, was there ever a time on
01:55 13 the *Deepwater Horizon* that it was required by the
01:55 14 operations to close the BOP and shut the well in? Did
01:55 15 that ever occur? I'm just very generically saying shut
01:55 16 the well in.

01:55 17 "ANSWER: Any time we have an indication that
01:55 18 something is not right, that's our first course of action.

01:55 19 "QUESTION: Right. And that could be sensing of gas,
01:55 20 acknowledgment of pressures. It could be many things,
01:55 21 correct?

01:55 22 "ANSWER: It could just be the driller's opinion that
01:55 23 something is wrong.

01:55 24 "QUESTION: Yeah. Many times, a perceived pending
01:56 25 kick or pending blowout or pending loss of control of the

01:56 1 well, you would shut the well in instinctively, correct?
01:56 2 As a general proposition.

01:56 3 "ANSWER: The best way for me to put it is: A
01:56 4 driller is trained to shut the well in if he has any
01:56 5 indication that something is wrong."

01:56 6 "A driller is trained to shut the well in if he
01:56 7 has any indication something is wrong."

01:56 8 Let's see what Mr. Christopher Pleasant, TO's
01:56 9 subsea supervisor, said about the same subject, Judge.

01:56 10 "QUESTION: In the event that a well control event is
01:56 11 detected, is there a protocol for informing you of that so
01:56 12 that you can go to station to assist with shutting in the
01:57 13 well?

01:57 14 "ANSWER: Shutting in the well, secure the well, call
01:57 15 me.

01:57 16 "QUESTION: Okay.

01:57 17 "ANSWER: Don't wait on me.

01:57 18 "QUESTION: Call you but don't wait on you?

01:57 19 "ANSWER: No. Shut the well in.

01:57 20 "QUESTION: Shut the well and then call you?

01:57 21 "ANSWER: Then call me."

01:57 22 And last, Your Honor, along that same subject,
01:57 23 let's see what one of the BP folk said about it, Dr. Azar, the
01:57 24 drilling expert.

01:57 25 "QUESTION: Let's go back some steps. Our

01:57 1 hypothetical driller has not yet shut in the well, but he
01:57 2 has detected an anomaly that could indicate a kick. I'd
01:57 3 like to ask your opinion and whether you believe his first
01:57 4 step should be to try to discover what the anomaly is and
01:57 5 then shut in the well, if it turns out it's a potential
01:57 6 kick; or is it your opinion that he should shut in the
01:57 7 well and then try to study and determine what the anomaly
01:57 8 is.

01:57 9 "ANSWER: Shut in -- shut in first and then
01:58 10 investigate. You don't try to investigate before you shut
01:58 11 in.

01:58 12 "QUESTION: Is that a basic well control principle?

01:58 13 "ANSWER: Absolutely. It is taught in every school
01:58 14 that I'm familiar with.

01:58 15 "QUESTION: Is it -- I'm asking this a different way.
01:58 16 Is it a fundamental principle that every driller should
01:58 17 understand? That is, if you have an anomaly, shut in the
01:58 18 well, then determine what the anomaly is, as opposed to
01:58 19 doing your study of the anomaly and then shutting in the
01:58 20 well?

01:58 21 "ANSWER: Once you detect an anomaly, you shut in the
01:58 22 well and then investigate. And it's not the other way
01:58 23 around."

01:58 24 Now let's, Your Honor, take a look at a time
01:58 25 line on April 20, 2010, where it shows that Transocean failed

01:58 1 to timely shut in the well but instead investigated first
01:58 2 before doing so. At 2126 to 2127, there was a pressure
01:59 3 increase on the kill line to 833 psi.

01:59 4 2129 to 2130, Transocean drill crew turned the
01:59 5 pumps off to investigate -- not shut in but turn them off to
01:59 6 investigate.

01:59 7 2130 to 2136, Transocean drill crew discussed a,
01:59 8 quote, pressure differential there in the kill line and the
01:59 9 drill pipe.

01:59 10 2138, Your Honor, jumping ahead a little bit due
01:59 11 to time, hydrocarbons entered the riser according to BP.

01:59 12 2143, hydrocarbons reached the rig floor
01:59 13 according to Transocean.

01:59 14 2143, Transocean's drill crew shut upper annular
01:59 15 preventer element.

01:59 16 They waited 13 minutes, Your Honor -- very, very
01:59 17 critical minutes -- from when they -- at 2126 to 2127, when
01:59 18 they realized they had their pressure increase.

01:59 19 2129 to 2130 is when they turned the pumps off
01:59 20 to investigate.

01:59 21 From 2130, Your Honor, to 2143, 13 minutes, they
02:00 22 were investigating. They did not shut in as they should have
02:00 23 done or -- according to their own manuals and the testimony of
02:00 24 their own folks.

02:00 25 Your Honor, 2147, Transocean drill crew closed

02:00 1 the variable bore rams. They had already done it backwards to
02:00 2 the way they should have done it, Your Honor. They
02:00 3 investigated, see what was wrong, and then decided to shut in.
02:00 4 It should have been the other way around.

02:00 5 Judge, here is another still slide showing the
02:00 6 BOP sequence as it should have occurred. You will see on the
02:00 7 left the still slide and then the right showing the
02:00 8 hydrocarbons escaping. It's showing -- this is the way it
02:00 9 should have been done, had it been done correctly, but it was
02:00 10 not, as the evidence will show as we go through this trial.

02:00 11 Coming up very, very, very important there,
02:01 12 Your Honor, with that drill string being pulled, that was very
02:01 13 important. And this is the way it should have been done, but
02:01 14 the way it was not done, as the evidence will show.

02:01 15 Judge, moving ahead, there were also complaints
02:01 16 in the depositions that we believe the evidence will show that
02:01 17 Transocean failed to maintain adequately and properly their
02:01 18 equipment there on the rig; that it was not in a state of
02:01 19 repair, as it should have been, so that when they attempted to
02:01 20 activate the BOP, it would not activate it as it should have.

02:01 21 Here's Mr. Doug Brown, Transocean's second
02:01 22 engineer, a rig mechanic, when he was asked about the subject
02:01 23 of BP maintaining its equipment.

02:01 24 "QUESTION: Do you know what conditions-based
02:01 25 maintenance is?

02:01 1 "ANSWER: I'm not really sure.

02:01 2 "QUESTION: I think that means, when it breaks, you
02:01 3 fix it. Have you ever heard that language in the
02:02 4 Transocean culture?

02:02 5 "ANSWER: Yes.

02:02 6 "QUESTION: What does it mean in the Transocean
02:02 7 culture?

02:02 8 "ANSWER: In the Transocean culture, it was run it
02:02 9 until it breaks."

02:02 10 I can't imagine running it until it breaks. On
02:02 11 something as dangerous as deepwater drilling, you have a
02:02 12 culture that one of their own rig mechanics testifies their
02:02 13 culture is, we run it until we break it.

02:02 14 Your Honor, turning now to the subject of the
02:02 15 cement arguments that BP and the PSC have advanced, we suggest
02:02 16 and believe the evidence will show that those arguments are
02:02 17 simply wrong.

02:02 18 Judge, blowouts are caused by loss of well
02:02 19 control, not by cement failure. That's axiomatic in the oil
02:02 20 and gas industry. Cement is not a barrier until it is
02:02 21 successfully tested by the operator, either with a CBL and/or a
02:02 22 negative pressure test. You are going to hear that Transocean
02:03 23 CEO say that later, and that is it would be unwise to rely upon
02:03 24 cement as a barrier until you have tested it.

02:03 25 Halliburton, Your Honor, was hired to design,

02:03 1 test, and pump cement. It was the operator, BP's,
02:03 2 responsibility to confirm the cement was placed in the proper
02:03 3 location and effectively isolated hydrocarbon zones. BP failed
02:03 4 to do that. That was not Halliburton's responsibility to place
02:03 5 the cement in the proper location. That was up to BP and its
02:03 6 plan. Halliburton designed the cement slurry and then they
02:03 7 pumped it. You are going to hear BP's people say, eventually,
02:03 8 Halliburton did a great job in the execution of that cement
02:03 9 job.

02:03 10 Your Honor, there is actually no credible
02:03 11 evidence that nitrogen broke out of the foam slurry. The
02:03 12 evidence will show later what this nitrogen was, what it was
02:03 13 made up of, and in the foam slurry, how it came about.

02:03 14 Absolutely no credible evidence the cement
02:04 15 slurry did not set up. Speculation, conjecture, but there's no
02:04 16 evidence of it, Your Honor, not from the experts.

02:04 17 Your Honor, BP acknowledged that the job
02:04 18 execution was to plan. Let's look at the two e-mails -- couple
02:04 19 of e-mails of Brian Morel, who has since taken the Fifth.
02:04 20 Let's see what he said about Halliburton at the time and the
02:04 21 job that my client did.

02:04 22 Here's an e-mail, Your Honor, he wrote on
02:04 23 April 20, 2:52 a.m., after the cement job had just finished
02:04 24 running. He wrote it to John Guide, the head of the crew of
02:04 25 the cementing -- excuse me, the engineering group, Mark Hafle,

02:04 1 Brett Cocalles, and Greg Walz, the senior engineer with BP. He
02:04 2 said: "Just wanted to let everyone know the cement job went
02:04 3 well."

02:04 4 Mr. Hafle wrote back later in the day on the
02:04 5 20th of April, saying: "Great job."

02:04 6 Next you have Mr. Morel writing on April 20,
02:04 7 later in that day. He is writing it, again, only to engineers
02:04 8 within BP, Your Honor. He didn't copy Jesse Gagliano. He
02:05 9 said: "Just wanted to let you know that the Halliburton cement
02:05 10 team they sent out did a great job."

02:05 11 Judge, that was then. This is now. Now is when
02:05 12 they want to pass the buck and blame my client for their
02:05 13 misdeeds, those of BP, and for their wrongdoing. They want to
02:05 14 go back and reinvent and rewrite what happened.

02:05 15 The engineers working there with BP said my
02:05 16 client did a fine job. They complimented them on what they
02:05 17 did. Complimented them on what they did, and experts from a
02:05 18 number of the other parties in this case have said that the
02:05 19 cement slurry design that was done by Jesse Gagliano --
02:05 20 although it did include that additive D-Air 3000 -- was a good
02:05 21 and an acceptable design because of the addition of what is
02:05 22 known as Surfactant 2000, a foamer that offset any negative
02:05 23 effects you might have from the D-Air 3000. We have experts
02:05 24 that are going to say that. They were employed by other
02:06 25 parties in this very litigation.

02:06 1 Judge, as I said, lack of zonal isolation does
02:06 2 not equal blowout. You will see here many folks that were
02:06 3 deposed in this litigation. I'm not going to show any slides
02:06 4 today. Either their depositions will be read as we go through
02:06 5 the trial, or they will come into the courtroom. But all of
02:06 6 these folks here say -- from Richard Lynch, BP's vice president
02:06 7 of Global Wells Organization; Kevin Lacey, formerly with BP,
02:06 8 who was former vice president of drilling and completions in
02:06 9 the Gulf of Mexico; and Kent Corser -- a host of others, Greg
02:06 10 Walz, several experts here, Your Honor, all saying that lack of
02:06 11 zonal isolation, in and of itself, does not equal blowout.

02:06 12 Your Honor, the cement should not have been
02:06 13 relied upon until it was confirmed to be a barrier. Until it
02:06 14 is confirmed to be a barrier.

02:06 15 Let's see what Dr. J.J. Azar, BP's expert, said
02:07 16 about that subject.

02:07 17 **"QUESTION:** Was the purpose -- or at least one of the
02:07 18 purposes of the negative pressure test on April 20th to
02:07 19 test whether the cement had -- it was adequately acting as
02:07 20 a barrier to the influx of hydrocarbons into the casing?

02:07 21 **"ANSWER:** Supposed to, yes."

02:07 22 And, Your Honor, let's see what -- we now have
02:07 23 got BP's drilling expert. Let's see what BP's cement expert,
02:07 24 Ronald Crook, said about this same subject.

02:07 25 **"QUESTION:** How would you determine whether the

02:07 1 cement you've placed in the well is actually a barrier?

02:07 2 "ANSWER: By forming -- performing testing.

02:07 3 "QUESTION: What kind of testing?

02:07 4 "ANSWER: Like an FIT test, a negative test."

02:07 5 You have to perform a negative test if you want
02:07 6 to confirm that cement is in fact a barrier. As Mr. Roy said,
02:07 7 it should have been a barrier to flow, but you can't have it
02:08 8 until you have determined that it, in fact, is a barrier.

02:08 9 Let's see what Mr. Steve Newman said, the CEO of
02:08 10 Transocean, about that same subject.

02:08 11 "QUESTION: Would you consider cement to be a barrier
02:08 12 before it's been tested?

02:08 13 "ANSWER: Before it's been tested?

02:08 14 "QUESTION: Yeah.

02:08 15 "ANSWER: I think that -- I think it would be right
02:08 16 to suspect its capability to fulfill that function.

02:08 17 "QUESTION: But before it's --

02:08 18 "ANSWER: I think it would be unwise to rely on it as
02:08 19 a barrier until it's tested."

02:08 20 The CEO of Transocean says: "I think it would
02:08 21 be unwise to rely on it -- that is, cement -- as a barrier
02:08 22 until it's tested."

02:08 23 That was BP's responsibility, Judge, and it
02:08 24 wasn't done. They attempted to test it, but they have now
02:08 25 admitted that they tested it incorrectly and the test came back

02:08 1 as a failed test.

02:09 2 Judge, the cement design that you have heard us
02:09 3 talk about today so far was a joint effort between BP and
02:09 4 Halliburton. You are going to hear BP talk about it was
02:09 5 Halliburton's cement design. Well, BP had a lot of input in
02:09 6 that design. They provided the parameters, the inputs. Much
02:09 7 of the information that Jesse Gagliano for Halliburton relied
02:09 8 upon were provided by BP.

02:09 9 You're also going to see that BP left out one of
02:09 10 the very important hydrocarbon zones there in the well, did not
02:09 11 disclose that to Jesse Gagliano prior to the time the cement
02:09 12 slurry design was completed, prior to the time that the job was
02:09 13 run and, in fact, Judge, did not disclose that hydrocarbon live
02:09 14 zone until after this lawsuit was started and the depositions
02:09 15 were under way.

02:09 16 The cement design and modeling was a
02:09 17 back-and-forth process between BP and Halliburton involving BP
02:09 18 engineers and one of BP's leading cement experts from around
02:10 19 the world. Jesse Gagliano generated multiple versions of the
02:10 20 cement program in what we know as OptiCem and forwarded them to
02:10 21 BP for review, changes, and approval.

02:10 22 Judge, this exchange of information went on for
02:10 23 months with these various engineers. And also, the gentleman
02:10 24 with BP that I mentioned was a cement expert was a gentlemen by
02:10 25 the name of Erick Cunningham, a very, very knowledgeable cement

02:10 1 expert within BP's organization, who was involved in this
02:10 2 process of the cement design and working with the engineers at
02:10 3 BP as well as Jesse Gagliano.

02:10 4 BP approved the use of foam cement, Your Honor,
02:10 5 which had been recommended by Jesse. He thought it was the
02:10 6 right type of mix, the right cement that ought to go down
02:10 7 there. BP agreed with that. Erick Cunningham agreed with it.
02:10 8 And also, BP approved and required the use of base oil, the top
02:10 9 of cement volumes, how much was going to be needed and the
02:11 10 retarder concentration in the slurry.

02:11 11 What I mean by that, Judge, was that Jesse
02:11 12 Gagliano, as you will see in an e-mail in a moment, he
02:11 13 recommended the use of 8 gallons of retarder in the slurry. BP
02:11 14 said, "No, we are going to go with 9 gallons." It made a
02:11 15 difference, Judge.

02:11 16 BP was dictating some of the parameters of what
02:11 17 was going to go into that slurry. BP failed to disclose that
02:11 18 M57B gas zone, the disclosure of which, Your Honor, would have
02:11 19 flagged the job as having critical gas flow potential, likely
02:11 20 requiring a redesign of the cement job and/or casing from a
02:11 21 long string to a liner tieback.

02:11 22 That's the zone that I was talking about,
02:11 23 Your Honor -- you will hear a lot about it in this trial, that
02:11 24 BP did not inform Jesse of this live zone, the M57B zone, did
02:11 25 not tell my client about that so that Jesse couldn't plan

02:11 1 around it in determining how much cement volume was going to be
02:11 2 needed to also cover that zone.

02:12 3 Jesse Gagliano generated, Your Honor, these
02:12 4 programs and forwarded them to BP for approval. Here's the
02:12 5 e-mail, Judge, dated April 17. Three days before the well blew
02:12 6 out, he is sending it to Brian Morel and other gentlemen there,
02:12 7 engineers with BP. This is the one dealing with the retarder
02:12 8 concentration: "Attached are the lab tests, one with 8 gallons
02:12 9 of retarder and one with 9 gallons. Below are the pump times."

02:12 10 He goes on to say, "I would be comfortable going
02:12 11 with the 5 1/2 hours time," meaning he wanted to go with
02:12 12 8 gallons. He wanted to go with 8.

02:12 13 You see, Jesse then writes the next day,
02:12 14 Your Honor, on April 18, and he says: "Has it had to ask BP?
02:12 15 Has a decision been made yet if you are going to go with the
02:12 16 8 gallons or 9 gallons of retarder?"

02:12 17 That wasn't Halliburton dictating what was going
02:12 18 to be in it. He is asking, have you made the decision what you
02:12 19 are going to go with?

02:13 20 Brian Morel writes him back two days before the
02:13 21 blowout and says 9 gallons. Offered no explanation, no caveat,
02:13 22 what do you think, Jesse? Are you okay with that? Just says,
02:13 23 we're going to go with 9 gallons.

02:13 24 Judge, not only do we have BP rejecting and not
02:13 25 following the advice of Halliburton regarding retarder

02:13 1 concentration; we also have them disregarding Halliburton's
02:13 2 recommendation regarding centralizers. Jesse had recommended
02:13 3 21 centralizers, which showed a minor gas flow potential with
02:13 4 the OptiCem model. Without informing Jesse, BP decided to go
02:13 5 with six.

02:13 6 They had brought out Weatherford centralizers,
02:13 7 the other 15 they needed. They had 21 there on the rig. But
02:13 8 instead of shut down and take the time necessary, spend the
02:13 9 money to put the other 15 on, they went only with six
02:13 10 centralizers, trying to save time and money, refused to put the
02:14 11 other 15 on even though they were there.

02:14 12 After learning from a Halliburton cement person,
02:14 13 Your Honor, on the rig of BP's decision regarding the six
02:14 14 centralizers, Jesse prepared the final OptiCem report. This
02:14 15 OptiCem showed a severe gas flow potential.

02:14 16 Let's see Jesse's e-mail on that subject.
02:14 17 Here's where he writes: "Attached is a revised proposal with
02:14 18 the changes, I believe, captured all the changes. Can you also
02:14 19 confirm if we are running the additional centralizers or not?
02:14 20 I have heard from the rig we are not going to run them. If
02:14 21 this is the casing" -- he meant "case" -- "I will update the
02:14 22 OptiCem to reflect."

02:14 23 This is a day before they start running it, and
02:14 24 BP still has not told him how many centralizers they're going
02:14 25 to run so that he could run his models and make sure that BP

02:14 1 understood what the degree of seriousness of the gas flow
02:14 2 potential might or might not be.

02:15 3 Judge, we have seen this e-mail here where
02:15 4 talked about six instead of 21. Our position is the evidence
02:15 5 will show that BP could care less, end of story, when
02:15 6 Mr. Cocalles wrote on April 16, "Even if the hole is perfectly
02:15 7 straight, a straight piece of pipe, even in tension, will not
02:15 8 seek the perfect center of the hole unless it has something to
02:15 9 centralize it."

02:15 10 Jesse was recommending 21. BP went with six
02:15 11 knowing that it was -- as Mr. Walz had said earlier, they were
02:15 12 going to assume the risk. "But who cares? It's done. End of
02:15 13 story. We'll probably be fine, and we'll get a good cement
02:15 14 job. I would rather have to squeeze than get stuck above the
02:15 15 wellhead. So Guide is right."

02:15 16 Squeeze is what I was talking about earlier,
02:15 17 Your Honor. When you determine, either from a CBL or through a
02:15 18 negative pressure test, that you've got an issue with your
02:15 19 cement job, then you can go back in to remediate; and the way
02:16 20 to do that is with a squeeze job.

02:16 21 But when he says, "Who cares, end of story,"
02:16 22 yes, Your Honor, it was the end of the story that evening for
02:16 23 11 families when their loved ones were gone. And to have this
02:16 24 e-mail written here some four days before the blowout where
02:16 25 this gentleman is talking about, "Who cares, end of story."

02:16 1 My client was doing all it could, Judge,
02:16 2 recommending go with 21. Let's try to straighten that pipe up.
02:16 3 As he says here, "Even if a hole is perfectly straight, a
02:16 4 straight piece of pipe, even in tension, will not seek the
02:16 5 perfect center."

02:16 6 Jesse knew it needed to be centralized. They
02:16 7 went with six rather than the 21, continually rejecting,
02:16 8 failing to acknowledge and failing to follow Halliburton's
02:16 9 recommendations about what they were going to do as far as
02:16 10 centralization, retarder and other things.

02:16 11 Judge, Mr. Greg Walz was asked about this
02:17 12 subject, and that is about running the six and the risk that
02:17 13 was going to have to be assumed. Let's see what he said in his
02:17 14 deposition.

02:17 15 "QUESTION: What I hear you saying, you and John
02:17 16 Guide talked about those concerns of Jesse that you say
02:17 17 you shared with Jesse, the two of you talked about it.
02:17 18 And the two of you together assumed those risks on behalf
02:17 19 of BP, did you not?

02:17 20 "ANSWER: We -- we decided to -- in our judgment to
02:17 21 stay with the -- repositioning the six centralizers.

02:17 22 "QUESTION: And you knew that was a risk?

02:17 23 "ANSWER: Yes.

02:17 24 "QUESTION: But you and John decided that even though
02:17 25 that was a risk of using only six centralizers, as you say

02:17 1 using your words, it was a risk, you on behalf of BP, you
02:17 2 and John Guide assumed for BP that risk, did you not, by
02:17 3 going with six centralizers?

02:17 4 "ANSWER: Yes, sir."

02:17 5 Judge, BP again ignored another Halliburton
02:17 6 recommendation in a series of failure to follow Halliburton's
02:17 7 advice with regard to bottoms-up circulation. It is common
02:18 8 cementing practice or best practice to circulate the hole a
02:18 9 minimum volume of one bottoms up once casing is on bottom.
02:18 10 BP's own best practices, Judge, are to circulate a minimum of
02:18 11 two volumes up. Two volumes up.

02:18 12 On April 19, Jesse discussed with Greg Walz a
02:18 13 need for a full bottoms up before the cement job was pumped.
02:18 14 He recommended the full bottoms up. Contrary to Halliburton's
02:18 15 recommendation, Your Honor, BP had less than a full bottoms up
02:18 16 circulated before the cement job was pumped. In fact, BP's own
02:18 17 company man, Bob Kaluza, at a cementing meeting on April 17,
02:18 18 said that we are going to run it with less than one bottoms up.
02:18 19 Even though BP's own best practices are to run two,
02:18 20 Halliburton's recommending run at least one, Bob Kaluza says we
02:18 21 are going to do it with less than one.

02:18 22 Judge, let's change now to the cement design
02:18 23 again and talk a little bit about this D-AIR 3000 and the
02:19 24 slurry design. It was in fact reasonable and appropriate to
02:19 25 include it. Jesse was attempting to meet BP's expectations of

02:19 1 transferring leftover blend to a new well to reduce cost.

02:19 2 Judge, this was something that was a practice that BP and Jesse
02:19 3 have done and used on other wells, as cost was always a factor
02:19 4 with BP. They had always tried to use the blends when they
02:19 5 could from other wells. Here it was taken off the Kodiak well
02:19 6 and used on the Macondo.

02:19 7 The foaming effects of D-AIR can be overcome,
02:19 8 Your Honor, with sufficient amounts of foaming agent or
02:19 9 surfactant, as I mentioned earlier, a product known as
02:19 10 ZoneSealant 2000. The experts in this case agree that the
02:19 11 presence of D-AIR is an appropriate additive in a foam cement
02:19 12 slurry. Contrary to what you are going to hear, Judge, from
02:19 13 BP, oh, they shouldn't have used it, several of the experts
02:19 14 said it was absolutely acceptable.

02:19 15 BP approved of the slurry containing the
02:19 16 additive D-AIR 3000. They received from Jesse Gagliano report
02:20 17 after report after report showing all of the various additives
02:20 18 that were in the slurry, what it was going to do, and all the
02:20 19 other parameters as they went through the various stages of the
02:20 20 modeling.

02:20 21 Judge, a stable slurry can include a defoamer.
02:20 22 Let's look at what just a couple of the experts have said here
02:20 23 regarding using D-AIR 3000 in a foam slurry.

02:20 24 Let's pull up Mr. Ron Crook, BP's cement expert.

02:20 25 "QUESTION: Okay, sir. And so my question of you, as

02:20 1 you sit here today, do you believe -- do you believe that
02:20 2 the presence of D-AIR 3000 in the -- in cement can be
02:20 3 offset with the appropriate amounts of surfactant being
02:20 4 included in the cement as an additive?

02:20 5 "ANSWER: It is possible.

02:20 6 "QUESTION: And you know that for a fact surfactant
02:20 7 can offset D-AIR if appropriate amounts are used? You
02:20 8 know that, don't you?

02:20 9 "ANSWER: It is possible, yes, sir."

02:20 10 Judge, let's see what Mr. Greg Garrison said
02:21 11 about it, who performed cement testing post-incident for the
02:21 12 JIT.

02:21 13 "QUESTION: You indicated that you noticed that there
02:21 14 was D-AIR in the slurry --

02:21 15 "ANSWER: Yes.

02:21 16 "QUESTION: -- that Halliburton used to design the
02:21 17 Macondo production casing job, right?

02:21 18 "ANSWER: Yes.

02:21 19 "QUESTION: Okay. As a cement tester, you would
02:21 20 agree with me that there are additives that can counteract
02:21 21 the presence of D-AIR, right?

02:21 22 "ANSWER: Yes.

02:21 23 "QUESTION: And, in fact, if you put enough foaming
02:21 24 agent in a slurry, you can counteract the effects of
02:21 25 D-AIR, can't you?

02:21 1 "ANSWER: Yes, you can.

02:21 2 "QUESTION: The mere presence of D-AIR in a slurry
02:21 3 intended to be foam for a production casing job does not
02:21 4 automatically say this is an inappropriate slurry for
02:21 5 foaming, does it?

02:21 6 "ANSWER: No.

02:21 7 "QUESTION: Okay. And, in fact, what matters is the
02:21 8 ability to test it to verify that you have enough
02:21 9 surfactant or foaming agent in it to counteract the
02:21 10 effects of D-AIR, correct?

02:21 11 "ANSWER: Correct."

02:21 12 Judge, let's jump over now, if we can, and talk
02:21 13 about something that is known as the variability of cement.
02:21 14 The PSC and BP's cement test post-incident do not show cement
02:21 15 instability. Due to the principle of variability of cement,
02:22 16 only foam, stability, and other tests conducted on actual rig
02:22 17 cement have any relevance here. Recognize -- and this was
02:22 18 recognized, Judge, in the BP/Halliburton contract where it said
02:22 19 that only operational testing would be done with rig samples,
02:22 20 not lab samples.

02:22 21 These other tests that were done post-incident
02:22 22 where they try to say earlier -- show that the cement slurry
02:22 23 was unstable, they were done with lab samples, not rig samples.
02:22 24 Your Honor, it is recognized in the industry of hot-shotting
02:22 25 samples to shore for operational testing and also acknowledged

02:22 1 by non-Halliburton witnesses and third-party labs that
02:22 2 conducted post-incident testing.

02:22 3 Judge, let's see what a couple of folks said
02:22 4 regarding the use of lab samples instead of rig samples and
02:22 5 whether or not that is representative of rig cement testing.
02:22 6 Let's see Mr. Greg Garrison.

02:22 7 "QUESTION: And so the industry -- the operators in
02:22 8 the industry, for example, incur time and expense to
02:22 9 either use a helicopter or a boat every 20 to 30 days to
02:23 10 go get a refreshed sample from the rig for purposes of
02:23 11 coming back and testing for an operational job; is that
02:23 12 right?

02:23 13 "ANSWER: Yes.

02:23 14 "QUESTION: And would you agree with me that the
02:23 15 reason they do that is out of concerns for
02:23 16 representativeness of the testing?"

02:23 17 "ANSWER: Yes.

02:23 18 "QUESTION: Okay. And just not to put too fine a
02:23 19 point on this, the concern is that if we were going to
02:23 20 have a production casing job and we know that there is a
02:23 21 blend out on the rig, we would not try to replicate that
02:23 22 blend in the lab and test it in the lab and transpose
02:23 23 those results to what we expect to happen with the rig
02:23 24 blend, would we?

02:23 25 "ANSWER: No, we wouldn't.

02:23 1 "QUESTION: There could be differences, increases or
02:23 2 decreases in humidity during the transport process,
02:23 3 correct?

02:23 4 "ANSWER: Yes.

02:23 5 "QUESTION: And each of those things has the effect
02:23 6 to alter the chemical characteristics of the actual blend
02:23 7 itself, correct?

02:23 8 "ANSWER: Yes, it can.

02:23 9 "QUESTION: Okay. And to guard against that, the
02:23 10 uncertainty of that, it's one of the reasons the industry
02:23 11 actually goes out and refreshes sampling for operational
02:23 12 testing from the rig, correct?

02:23 13 "ANSWER: Yes.

02:23 14 "QUESTION: Okay. And each of those things we've
02:24 15 talked about introduces a potential or the possibility of
02:24 16 variability in testing, doesn't it?

02:24 17 "ANSWER: Yes."

02:24 18 Judge, let's see what Mr. Daryl Kellingray said.
02:24 19 He's another internal BP employee who's recognized around the
02:24 20 world as one of the leading cement experts in the world on this
02:24 21 subject -- said about variability of testing and using lab as
02:24 22 opposed to rig samples.

02:24 23 "QUESTION: But you would not rely upon those tests
02:24 24 to the extent that you would on tests conducted on rig
02:24 25 samples, would you?

02:24 1 **"ANSWER:** As I said, we have a requirement in BP, you
02:24 2 would always test anything that goes into the well using
02:24 3 rig samples.

02:24 4 **"QUESTION:** And there will be differences -- if
02:24 5 you're testing with rig samples, they would be different
02:24 6 results from those using substitute samples, correct? Yes
02:24 7 or no?

02:24 8 **"ANSWER:** It's quite common that we would see
02:24 9 differences."

02:24 10 Quite common that we would see differences.
02:24 11 Your Honor, pre-incident tests show the slurry was stable.
02:24 12 Halliburton's final foam stability test performed pre-incident
02:24 13 using actual rig cement showed the slurry was stable. You will
02:25 14 see that test here in the courtroom as we go through the
02:25 15 testimony over the next several weeks. There is absolutely no
02:25 16 credible evidence that the nitrogen gas broke out of the foam
02:25 17 slurry pumped into the well on April 19 and April 20.

02:25 18 Judge, dealing with the subject of mud logging,
02:25 19 as I try to close it up here, Halliburton's mud logging
02:25 20 services were performed correctly. Your Honor, the Halliburton
02:25 21 mud logger is actually a second set of eyes on the rig. The
02:25 22 first set is T0, Transocean. The second set was the mud
02:25 23 logger. The mud logger has less information available to him
02:25 24 than the Transocean drill crew.

02:25 25 You will see some frames here in a moment

02:25 1 showing where their locations -- where their work sites are.
02:25 2 Transocean obviously had greater visibility with what was going
02:25 3 on throughout the rig. Halliburton's folks did not. Rig
02:25 4 activity on April 20 impeded Joe Keith's ability to monitor all
02:25 5 sensor data for signs of a kick. And, Your Honor, Joe Keith
02:25 6 did not miss any clear indicators the well was experiencing a
02:25 7 kick.

02:25 8 Next is a still frame, Your Honor, showing the
02:26 9 Transocean drilling control station. It shows here all the
02:26 10 glass all the way around. They will be able to see the drill
02:26 11 pipe. They can see the floor, see everything that was going
02:26 12 on. They see the mud pits; contrasted by Halliburton's mud
02:26 13 logging shack is inside the building, no external windows, not
02:26 14 able to see out.

02:26 15 They've got some monitors there; but as a second
02:26 16 set of eyes, they are limited in the equipment that the mud
02:26 17 logger has available. Although it does have equipment, to
02:26 18 monitor what's going on downhole, it cannot see all the other
02:26 19 things that would be going on in the well such as use of
02:26 20 open pit system for displacement, repeated flushing of trip
02:26 21 tanks during displacement, and in the numerous activities that
02:26 22 were going on there on that evening just prior to the blowout.

02:26 23 The transferring of mud between many of the
02:26 24 pits, offloading of mud to the *Damon Bankston* -- that was the
02:26 25 vessel next to the Macondo -- and the lack of communication,

02:26 1 Judge, from rig crew about activities under way. Joe Keith was
02:27 2 having a problem that evening communicating with the Transocean
02:27 3 employees, as you will see in this next time line.

02:27 4 5:00 or 1700 hours, Joe Keith comes on board, on
02:27 5 duty. 2000 to 2010, he called the rig floor about increase in
02:27 6 flow-out. They advised him they were dumping the trip tank.
02:27 7 Later on he called them up about slow gain in the active pits,
02:27 8 were told they were moving mud out of the sand trap. This is
02:27 9 all on that evening, Judge.

02:27 10 You jump over here now to 2034 to 2100, Joe
02:27 11 called to drill floor to advise he was going to take a break
02:27 12 for eight to 10 minutes. He took his break, he came back, he
02:27 13 called them. He looked, he saw no anomalies, no missed kick
02:27 14 indicators when he got back.

02:27 15 You jump over now, Your Honor, to 2116, he
02:27 16 called drill floor about rig pumps coming online in an abnormal
02:27 17 matter. Judge, he was told by the assistant driller, "That's
02:27 18 how we're doing it," and the assistant driller with Transocean
02:28 19 hung up on him. That's the lack of communication that he
02:28 20 didn't need there that evening. And for somebody to be trying
02:28 21 to lay it off on Joe Keith when he was making these repeated
02:28 22 calls, he was pointing out the issues that he saw, the
02:28 23 differential in the pressures. He was pointing all that out.

02:28 24 2126 to 2129, TO drill crew shut down the pumps
02:28 25 to investigate the pressure differential. That's important,

02:28 1 Your Honor. They shut down 13 -- they shut down at 2129 to --
02:28 2 2126 to 2129. And instead of shutting it in, they shut down
02:28 3 the pumps, started investigating. They had not yet shut in the
02:28 4 well, which they should have done.

02:28 5 Judge, going back here in the closing frame that
02:28 6 I've got, this case is about a loss of well control and BP's
02:28 7 misguided attempts to blame Halliburton and others for BP's
02:29 8 misconduct. During the negative test, BP and Transocean
02:29 9 removed the primary well control barrier, the heavier mud,
02:29 10 inviting the well to flow, the displacement, and disregarded
02:29 11 obvious signs that the well was flowing.

02:29 12 At 9:30, Transocean knew there was a problem but
02:29 13 failed to timely shut in the well, waiting a critical
02:29 14 13 minutes.

02:29 15 Judge, BP has acknowledged they misinterpreted
02:29 16 the negative pressure test. Witnesses have said -- lawyers
02:29 17 have said here today that if the negative pressure tests were
02:29 18 correctly interpreted, there would have been no blowout. A
02:29 19 squeeze job should have been done. BP was saving time and
02:29 20 money. Actions of BP resulted in casing buckling and casing
02:29 21 breach, using inefficient -- insufficient number of
02:29 22 centralizers. And as the leading PSC lawyer has recently said,
02:29 23 BP is trying to hide behind Halliburton.

02:29 24 Last point, Judge, we go right back to where I
02:29 25 started. BP's and Transocean's actions were superseding causes

02:30 1 of the blowout. Judge, I would say to you that I believe the
02:30 2 evidence will show that my client performed all of its
02:30 3 obligations and duties under its contract with BP. The cement
02:30 4 slurry was designed in a good manner, as it should have been,
02:30 5 has been determined by experts for many of the parties in this
02:30 6 case to have been a good design. The cement job was executed,
02:30 7 according to BP's own people, in an excellent manner.

02:30 8 My client's mud logging services were as
02:30 9 expected. Joe Keith did a good job. He is being blamed
02:30 10 unfairly for something he didn't do. We do not believe that
02:30 11 the actions of Halliburton in any way whatsoever, Your Honor,
02:30 12 contributed to the blowout and the very, very serious and
02:30 13 horrific incident/accident that happened that evening that cost
02:30 14 the lives of, no doubt, 11 wonderful men, 11 wonderful men.
02:30 15 Caused the loss of millions of barrels of oil that went into
02:31 16 the Gulf and have harmed so many people.

02:31 17 Judge, on behalf of Halliburton and myself and
02:31 18 my team, I would like to thank you for your patience in
02:31 19 allowing me to present Halliburton's opening statement here
02:31 20 today. Thank you, sir.

02:31 21 **THE COURT:** Thank you. BP is up next.

02:31 22 **MR. BROCK:** Your Honor, my time is 90 minutes. Do
02:31 23 you want to go ahead and do this now or take a short break?

02:31 24 **THE COURT:** Let's take about a 10-minute recess. We
02:31 25 have 90 minutes of BP, and then we have another 20 minutes

02:31 1 between Cameron and M-I. So we have about two hours left.
02:31 2 Let's take about a 10, 15-minute break.

02:31 3 (Recess.)

02:33 4 **THE COURT:** Please be seated.

02:46 5 All right. BP. Mr. Brock.

02:46 6 **MR. BROCK:** Good afternoon, Judge Barbier and
02:46 7 counsel. There have been a good number of statements made
02:46 8 today that BP has been pointing fingers at its contractors. I
02:47 9 hope that Your Honor will see what we have to present today as
02:47 10 pointing out facts that will be helpful to the Court and not
02:47 11 pointing fingers. That's certainly our intention in terms of
02:47 12 our presentation and in terms of what we intend to present at
02:47 13 trial.

02:47 14 On April 9, 2010, the drilling of the Macondo
02:47 15 well was complete. All of the drilling activity that was to
02:47 16 occur had been completed. What needed to occur after that is
02:47 17 that the well needed to be logged, the geologist needed to
02:47 18 understand what the conditions were in the hole and what the
02:47 19 possibilities were for coming back, and the well needed to be
02:47 20 cemented and temporarily abandoned. Those were the things that
02:47 21 were left to do after the drilling operations were complete on
02:48 22 April 9.

02:48 23 Unfortunately, in that period of time between
02:48 24 April 9 and the blowout that took place on the evening of the
02:48 25 20th, there were a number of mistakes and errors in judgment

02:48 1 that were made by BP, Transocean, and Halliburton. Those are
02:48 2 the things that we will be discussing today and in our
02:48 3 presentation during trial.

02:48 4 Every well that is drilled and completed has
02:48 5 preventions to a blowout, barriers to a blowout that are in
02:48 6 place to keep -- that are designed to keep from happening what
02:48 7 occurred here. BP had in place industry-standard redundant
02:48 8 systems, equipment, and people to prevent the very kind of
02:49 9 accident that occurred at the Macondo well. This is what's in
02:49 10 place in terms of industry standard.

02:49 11 You have heard a number of comments about these
02:49 12 barriers today. Mr. Underhill showed you the barriers that
02:49 13 were penetrated in the Swiss cheese model and advanced to the
02:49 14 Court that that shows that BP was grossly negligent. We say
02:49 15 that demonstrates precisely the opposite. Because BP had in
02:49 16 place industry-standard barriers, it shows their due care.

02:49 17 So what are the events that had to take place in
02:49 18 the presence of these industry-standard barriers for this
02:49 19 accident to occur? First, there is cement that is pumped to
02:49 20 the bottom of the hole to isolate the hydrocarbons at the
02:49 21 bottom of the hole. The idea is to pump the right kind of
02:50 22 cement, to get it in the right place so that the well will not
02:50 23 flow.

02:50 24 In this case, Halliburton was expected to design
02:50 25 a cement, test the cement, and pump the cement. Every

02:50 1 Halliburton witness that has testified in this case has said
02:50 2 about its cement design, that it should not have used
02:50 3 D-AIR 3000 in a cement that was designed to be a foam cement.
02:50 4 Should not have done that because D-AIR is the opposite of what
02:50 5 you are trying to achieve. It's a defoamer. That bad slurry
02:50 6 that was pumped to the bottom of the hole is what caused this
02:50 7 well initially to flow.

02:50 8 The second barrier that's in place --
02:50 9 industry-standard barrier that's in place is well integrity
02:50 10 testing. It's not just the negative tests. There are also
02:51 11 seal assembly tests and positive tests that are conducted in
02:51 12 order to test the integrity of the well. The negative test is
02:51 13 also included in that series of tests that can be conducted.

02:51 14 BP has acknowledged that it misinterpreted that
02:51 15 negative test. That is not new news. When BP initiated its
02:51 16 internal investigation two days after the accident, engaged
02:51 17 more than 50 engineers to look into this incident, they
02:51 18 thoroughly investigated it, and one of the outcomes of that
02:51 19 investigation was that the test was misinterpreted. We have
02:51 20 always acknowledged that, Your Honor, since that investigation
02:51 21 was complete and published in a nonprivileged way. We will
02:51 22 talk about that a little more in our presentation today.

02:51 23 Well control is also important. Well control is
02:52 24 primarily the responsibility of Transocean during this period
02:52 25 of time. They have a driller, an assistant driller who are

02:52 1 responsible continuously to monitor the well. It does not
02:52 2 matter what the activity is; it doesn't matter if you are
02:52 3 planning to temporarily abandon; continuously monitor the well.

02:52 4 Then, of course, there is the blowout preventer,
02:52 5 which is the last line of defense to an event like this. And
02:52 6 here what we see is a combination of problems that did not
02:52 7 allow the blowout preventer to shut in the well.

02:52 8 First, as many of the lawyers have said, the
02:52 9 blowout preventer was not activated in a timely fashion. It
02:52 10 needed to be activated at a time point earlier than it was.

02:52 11 Second, the blowout preventer was not properly
02:52 12 maintained. When communication was lost between the rig and
02:53 13 the blowout preventer, there was a redundant system there that
02:53 14 calls on the blowout preventer to shut in the well. If there's a
02:53 15 problem at the rig, there's a system on the control pods on the
02:53 16 BOP that activate the rams and shut in the well.

02:53 17 What we have learned about the BOP in this case
02:53 18 is that in one of the pods there was a dead battery and in
02:53 19 another of the pods there was a miswired solenoid. Those
02:53 20 maintenance deficiencies are primarily the responsibility of
02:53 21 Transocean.

02:53 22 Those are the multiple reasons and parties that
02:53 23 are involved in this blowout and the occurrence that occurred
02:53 24 here. That's just an overall summary of what we will present
02:53 25 now, Your Honor.

02:53 1 So as we think about how to understand the
02:53 2 industry and understand how deepwater drilling is managed,
02:54 3 especially in the Gulf of Mexico, we believe looking at the
02:54 4 case, using these three issues, is helpful; that is, the roles
02:54 5 and responsibilities of the companies, how the risks of
02:54 6 deepwater drilling are managed, and what caused the blowout.
02:54 7 Those are the issues we will try to focus on today and through
02:54 8 the trial.

02:54 9 Now, Your Honor, as we have learned about
02:54 10 drilling in the deepwater environment over the past two-plus
02:54 11 years in working in this case, one of the things that we have
02:54 12 learned is that the men on the rig have very close
02:54 13 relationships, and the drilling is termed what they call a *team*
02:54 14 *sport*.

02:54 15 We looked for a good example of a statement
02:54 16 relating to this, and we found this from Steve Newman, the CEO
02:54 17 of Transocean: "The well construction process is a
02:55 18 collaborative effort involving various entities and many
02:55 19 personnel: the well operator, government officials, the
02:55 20 drilling contractor, the mud contractor, the casing contractor,
02:55 21 the cement contractor, and others.

02:55 22 Deepwater drilling is complex. The technology
02:55 23 is complex. And the specialty contractors are what enable the
02:55 24 industry to continue to drill in deep water. These contractors
02:55 25 have specific responsibilities, specific duties to carry out in

02:55 1 the context of deepwater drilling.

02:55 2 BP also has an important role, and we don't step
02:55 3 away from that, not one bit. I want to focus here, Your Honor,
02:55 4 just on the last three bullet points here. In drilling
02:55 5 deepwater wells BP is responsible for designing and engineering
02:55 6 the well. We also obtain the lease, we file the drilling
02:56 7 permits and then develop a plan for drilling the well.

02:56 8 Our drilling engineers are considered the well
02:56 9 architects and the planning coordinators for drilling. And as
02:56 10 I have mentioned and as I think is well understood, operators
02:56 11 like BP use specialty contractors to drill the well, to monitor
02:56 12 the well, and cement the well.

02:56 13 This issue here has been referred to by the
02:56 14 Court already, but I would just like to show you the evidence
02:56 15 on this. BP did select Transocean as its drilling contractor
02:56 16 for this well. Transocean is one of the top drilling
02:56 17 contractors in the world, and BP stands by its selection of
02:56 18 Transocean to drill this well. We are going to talk about
02:56 19 mistakes and errors in judgment that were made, but Transocean
02:57 20 is one of the top drillers in the world, and it shows due care
02:57 21 by BP that it engages a company like Transocean.

02:57 22 Halliburton, the same situation. Here the
02:57 23 primary issue that's involved is foam cement, and Halliburton
02:57 24 holds itself out and is one of the top suppliers of foam cement
02:57 25 in the world.

02:57 1 So this is the team that's put together to do
02:57 2 the work in terms of the drilling of the well.

02:57 3 There's also the important piece of equipment,
02:57 4 the blowout preventer. This is just a pullout of the quote
02:57 5 that you were shown earlier today, I think, by the PSC. I
02:57 6 won't read that again. I will describe what we will talk about
02:57 7 a little bit later in terms of failure modes of the BOP.

02:57 8 This is a Gulf of Mexico MMS lease map,
02:57 9 Your Honor, and it just basically shows how active drilling is
02:58 10 in the Gulf of Mexico, how important it is to this region. And
02:58 11 it also demonstrates why the technology of deepwater drilling
02:58 12 has advanced to the advanced place that it has, and that is
02:58 13 that the resources in terms of oil is primarily in deep water.
02:58 14 If you look at the production of the Gulf of Mexico, there are
02:58 15 about 500 or so producing wells in deep water that's over
02:58 16 1100 feet, and they account, recent numbers I have looked at,
02:58 17 for about 80 percent of the oil production out of the Gulf. So
02:58 18 most of the production that we see now in the Gulf of Mexico of
02:58 19 oil is in deep water, that is, over 1100 feet of water.

02:58 20 These red dots that are coming up here are
02:58 21 places in the Gulf of Mexico, including Macondo, which came up
02:59 22 as the blue pin, where BP and Transocean worked together to
02:59 23 successfully drill wells. Halliburton was involved in most of
02:59 24 these wells. So these people, the folks that work for these
02:59 25 companies have been successfully doing this for a long time in

02:59 1 the Gulf of Mexico.

02:59 2 This is just another way of looking at the same
02:59 3 issue, but significantly, if you look at the Tiber well,
02:59 4 35,050 feet, that's the deepest well in history drilled by BP
02:59 5 and Transocean. And just before the Macondo well, you have
02:59 6 heard about the Kodiak well. In 2009 and early 2010, BP and
02:59 7 Transocean successfully drilled that well.

02:59 8 Now, Your Honor, you are going to hear in this
02:59 9 case a lot about the term *process safety*. You have heard about
03:00 10 it some today. You will learn that in process safety they have
03:00 11 their own language, their own way of looking at things, their
03:00 12 own way of approaching issues. You're going to see more
03:00 13 initials and long words to describe some of the things they do.
03:00 14 But it's an important issue. It's an important process. But
03:00 15 the one thing that we have to really keep front of mind when we
03:00 16 think about process safety is that the primary goal of process
03:00 17 safety is to prevent the loss of containment of hydrocarbons.
03:00 18 That's why process safety is in place.

03:00 19 You have heard about Dr. Bob Bea, who we will be
03:00 20 seeing tomorrow. In his deposition we asked him about the
03:00 21 development of the OMS system, the operating management system,
03:00 22 by BP and asked him: "Was it a positive step?"

03:00 23 He said: "Outstanding step.

03:01 24 "And you testified that the OMS system, in your
03:01 25 view, was an outstanding system?"

03:01 1 "Yes."

03:01 2 Then I would like to ask you to focus, Your
03:01 3 Honor, on the second question there. As you may recall,
03:01 4 Mr. Roy shared with you that Dr. Bea met with BP in the early
03:01 5 2000s to advise them on safety issues. He didn't share with
03:01 6 you that Dr. Bea has the view that BP expressed a major
03:01 7 commitment to a far better safety process regime after 2005.
03:01 8 We'll explore some of those steps with Dr. Bea when we have the
03:01 9 opportunity to question him tomorrow and maybe the next day.

03:01 10 There was a reference to one of the board
03:01 11 members, William Castell. An excerpt of his testimony was
03:01 12 shown where he said: "Of course, if we knew the well was going
03:01 13 to blow out, we wouldn't have drilled it." That's one of the
03:01 14 things sort of like Monday morning quarterbacking. If you look
03:02 15 back on something and you have a bad outcome, of course, you
03:02 16 would do something different.

03:02 17 I just want the Court to be comfortable, though,
03:02 18 that at all levels of BP in operations, we understood -- the
03:02 19 company understood that the loss of well control was a
03:02 20 significant risk, and it was treated as such.

03:02 21 In the Gulf of Mexico and throughout the world,
03:02 22 when an operator is working with a contractor, the safety
03:02 23 system that has the primary place on the rig is the
03:02 24 contractor's safety system. Judge Barbier, this testimony here
03:02 25 reflects the reason why. It's the preference of the drilling

03:02 1 contractor to use their system, their general practice to have
03:02 2 their HSE policies govern. It's less confusing for our people,
03:03 3 for our people to have to change management systems every time
03:03 4 they change companies. So there was a robust safety system in
03:03 5 place on the *Deepwater Horizon* when it was drilling the Macondo
03:03 6 well.

03:03 7 This reflects that Transocean identifies loss of
03:03 8 well control as a risk at the *Deepwater Horizon* in their major
03:03 9 accident risk assessment. If you look, Your Honor, at the
03:03 10 third column -- "Preventions": well control, maintenance and
03:03 11 testing of the BOP, instrumentation, hydrocarbon/combustible
03:03 12 gas systems, redundant BOP controls -- those are the issues
03:03 13 that we will be talking about in this case. These are the risk
03:03 14 mitigation processes that are in place to prevent a loss of
03:03 15 well control.

03:03 16 One of the things an operator wants to do if it
03:03 17 has a good safety system is to make sure that the people that
03:04 18 are working on the rigs that it contracts are in tune to the
03:04 19 safety standards that it desires to see met.

03:04 20 This is a 2008 Gulf of Mexico safety pulse check
03:04 21 of the *Deepwater Horizon* crew. You can see here the emphasis
03:04 22 that the crew of that vessel placed on safety.

03:04 23 "Do you feel you were given enough time to
03:04 24 properly plan the job?" 100 percent: Yes.

03:04 25 "Do you feel you could raise a safety concern

03:04 1 without repercussion?" 100 percent: Yes.

03:04 2 "Does senior facility leadership always send the
03:04 3 right message on safety?" 96 percent: Yes.

03:04 4 "Do you feel you are in control of your own
03:04 5 safety?" 100 percent: Yes.

03:04 6 People that work in safety will tell you that
03:04 7 these are very, very positive numbers and reflect that an
03:04 8 appropriate safety culture is in place on the rig.

03:05 9 This is a summary of the same survey from some
03:05 10 of the interview sheets that came back. "Strong performance
03:05 11 and safety culture is embedded." This is the
03:05 12 *Deepwater Horizon*. "Excellent team work between Transocean,
03:05 13 third party, and BP personnel."

03:05 14 I want to pause just for a second on something
03:05 15 that's been said by counsel for Transocean today, that there
03:05 16 were issues with communication, that we weren't telling them
03:05 17 about risks. That is just not true. This team, the
03:05 18 *Deepwater Horizon* vessel and crew working with BP, had an
03:05 19 excellent record, and they had an excellent record for
03:05 20 communication. We will talk in this case about the way they
03:05 21 did that by sharing the drilling program. Pre-spud meetings.
03:05 22 The well adviser programs. Five-day planners. Daily planners.
03:06 23 Daily meetings on rigs. Pre-job think drills. All of these
03:06 24 processes that are in place enabled good communication to take
03:06 25 place about the operation that's going on and the operation

03:06 1 that's coming up.

03:06 2 "All rig personnel are very proud of safety and
03:06 3 performance history." And that is the *Deepwater Horizon*
03:06 4 working with BP.

03:06 5 This has been mentioned today. I only want to
03:06 6 spend just a second on it, but it's something that is vitally
03:06 7 important to understand if we are going to have a good
03:06 8 understanding of what happened on April 20. And that is
03:06 9 kicks -- that is, the influx of hydrocarbons into the well --
03:06 10 are not uncommon in deepwater drilling; and they're especially
03:06 11 not uncommon in the Gulf of Mexico, which is one of the most
03:06 12 challenging environments in the world in which to drill. They
03:06 13 are not uncommon. The entire industry is organized around
03:07 14 detecting the kicks and techniques for shutting the well in
03:07 15 quickly when they are detected.

03:07 16 So how did BP and Transocean do when looking at
03:07 17 this important metric of kicks, that is, are they being
03:07 18 diligent when working together to be on top of well control
03:07 19 events? This shows you some of the data that was discussed
03:07 20 earlier. 329 of the 556 well control events were kicks. This
03:07 21 is 2005 to 2009, Your Honor. This is the data. A red zone
03:07 22 kick, as you have heard, is a kick that is more than
03:07 23 20 barrels. When you have more than 20 barrels of influx into
03:07 24 the well without catching the influx, that's considered a red
03:07 25 zone kick. Reasonable care keeps it under 20.

03:08 1 In the period of time 2005 to 2009, BP and
03:08 2 Transocean didn't have a single red zone kick. Not a single
03:08 3 one. This is an important number, too, because Transocean also
03:08 4 tracks the highest number of -- tracks the precautionary
03:08 5 shut-ins. And you can see here in the right-hand column over
03:08 6 there that BP had more precautionary shut-ins than any other
03:08 7 company, more than Shell and more than Chevron, who will be
03:08 8 described to you by Dr. Bea as gold standard companies.

03:08 9 What is a precautionary shut-in? That's when
03:08 10 the well is circulated, shut-in with slightest doubt of
03:08 11 increase in flow from well, or it could be that the well was
03:08 12 shut in due to no flow. This indicates rig alertness to
03:09 13 respond to a well control situation.

03:09 14 BP and Transocean had a terrific work record in
03:09 15 terms of the metric that matters in this case, well control,
03:09 16 until the unfortunate events of April 20.

03:09 17 So how does BP provide for a safe design and
03:09 18 drilling plan? I just want to cover this very briefly because
03:09 19 it will give you a time line. Your Honor, you will have this
03:09 20 slide. Hopefully it will be somewhat helpful to you. But it
03:09 21 shows the stage gates that BP goes through to design a well.
03:09 22 And then we also give you here when the gate meetings took
03:09 23 place on the Macondo well, and you can see that it's over five
03:09 24 months in the planning.

03:09 25 Just one brief point I will make about this is

03:09 1 that at each of these gate meetings, a gatekeeper gets a full
03:10 2 package of the material that has been assembled on things like
03:10 3 no drilling surprises assessment, the risk register, the
03:10 4 conceptual design, updating the risk register. All of those
03:10 5 things are done on a very careful and diligent way, and the
03:10 6 experts will tell you that BP's basis for design for this well
03:10 7 met industry standard.

03:10 8 Now we come to the important issue of well
03:10 9 integrity testing that we talked about in our first slide. I'm
03:10 10 going to direct Your Honor's attention first to the cement job
03:10 11 that started on April 19 around 8:00 and was completed at 12:35
03:10 12 on April 20. This cement job was pumped by Halliburton. And
03:10 13 as you can see here, Nathaniel Chaisson is reporting to Jesse,
03:11 14 "We have completed the job and it went well. Full returns were
03:11 15 observed throughout. I estimated 100-psi of lift pressure
03:11 16 before we bumped the plug."

03:11 17 Now, I'm going to be very honest with you. When
03:11 18 I got into this case, I had never heard of bumping the plug,
03:11 19 but let me just give you a bit of background because I think it
03:11 20 might be helpful as we go through the case. The cementers
03:11 21 understand the volume of the well. They understand pump rate.
03:11 22 And that gives them a very good sense for when the plugs that
03:11 23 go ahead of the cement when the job is being pumped should land
03:11 24 at the bottom of the well on what's called a *float collar*. You
03:11 25 have heard some discussion about that.

03:12 1 So what they are looking for is to see do those
03:12 2 plugs bump. When they do, there's an increase in pressure. If
03:12 3 they arrive about when they should, that tells you that there's
03:12 4 not a big issue with mud being in the well that would be
03:12 5 contaminating the cement. It also tells them that they can
03:12 6 expect that the treatment will go down through the float
03:12 7 collar, down through the shoe track, and make the turn up into
03:12 8 the annulus; that is, it's going where it should be, it's
03:12 9 arriving when it should.

03:12 10 Lift pressure is what occurs when the cement
03:12 11 gets down through the shoe track, down to the bottom, goes out
03:12 12 the shoe track; and when the cement starts coming up, because
03:12 13 it's heavier, there will be lift pressure. So that's the other
03:12 14 thing they look for: Is it happening about when we expect it
03:12 15 to? And are we seeing that lift pressure? Because that tells
03:12 16 us the cement is down and it's making the turn and it's coming
03:13 17 back up.

03:13 18 Full returns, that is, they know how much cement
03:13 19 they have pumped down. Are they getting a like amount back to
03:13 20 the rig? Is the well behaving as it should?

03:13 21 Those were the preconditions for a successful
03:13 22 cement job that were set for this well, and they were satisfied
03:13 23 here and reported to us as such. This is the Halliburton
03:13 24 cement job pumped as planned. BP believed at this time that
03:13 25 the cement had been pumped and that it was down through the

03:13 1 shoe track, up into the annulus.

03:13 2 So the next thing that occurs, no rest on the
03:13 3 rig. They finish up the cement job just after midnight. Then
03:13 4 from 1:00 to 3:00 in the morning -- 1:00 to 3:00 in the
03:14 5 morning, they conduct a seal assembly test. And that's simply
03:14 6 a positive test where they check the integrity of the seal
03:14 7 right at the wellhead. Then a positive pressure test is
03:14 8 conducted, and you see that this comes up the next morning.
03:14 9 And for both of these, the test passed. So the integrity of
03:14 10 the well is intact on the positive test.

03:14 11 And then the next thing that occurs is the
03:14 12 negative test. I hope this will be somewhat helpful, but this
03:14 13 just shows, in a series of three slides, how the negative test
03:14 14 is conducted. If you see in the first slide, the orange in the
03:14 15 middle is coming down the drill pipe, which has been lowered to
03:14 16 about 8300 feet from the surface. That spacer will come all
03:14 17 the way down to the end of the drill pipe and then it will turn
03:15 18 against the mud that's in the well and it will go back up, then
03:15 19 followed by seawater.

03:15 20 Over on the very far right, you will see that
03:15 21 the seawater has now displaced the spacer to above the BOP. So
03:15 22 that's the sequence that you are looking at in terms of the
03:15 23 setup of the negative test.

03:15 24 Why are they doing it that way? A negative test
03:15 25 is a controlled test of the well in the condition that it will

03:15 1 be when temporary abandonment occurs. So right there, if you
03:15 2 see the 6367 mark, that's where the cement plug would be set at
03:15 3 temporary abandonment. It's not a good test unless you test it
03:15 4 in the condition that it will be when you pull your BOP up and
03:15 5 leave the well. So that's the reason that this test is set up
03:16 6 in the way it is.

03:16 7 It's called *controlled*, Your Honor, because if
03:16 8 you look at the figure on the far right, the spacer that's in
03:16 9 the BOP -- above the BOP, if there were a well control event,
03:16 10 that spacer and mud could be released back into the well. So
03:16 11 it's a controlled test of what will occur.

03:16 12 These men, BP and Transocean, had conducted many
03:16 13 negative tests before. This just happens to be the one that
03:16 14 was conducted at Kodiak just before they came over to the
03:16 15 Macondo well. This one was done in January, BP and Transocean
03:16 16 conducting the test together. The men of Transocean knew how
03:16 17 to conduct a negative test. This is Brandon Burgess, and I
03:16 18 think you have seen some of his testimony. But Transocean's
03:17 19 men knew how to conduct a negative test.

03:17 20 Now, this gives a little more detail of what
03:17 21 happened on the day of the event. The first test is on the
03:17 22 left. It's a test on the drill pipe. They tried to bleed the
03:17 23 drill pipe down to zero. They did get down pretty close, but
03:17 24 pressure kept coming back up on the drill pipe. The men of
03:17 25 Transocean were aware of that. The men of BP were aware of

03:17 1 that. They worked on this issue for a long period of time.

03:17 2 One of the things that I think is important to
03:17 3 keep in mind -- I hope that we can convey this in an adequate
03:17 4 way during this trial, but the bottom line is when the men of
03:17 5 Transocean and BP are interpreting a test like this, there are
03:17 6 no dictators in the group. They are working collaboratively to
03:17 7 get to a decision that everyone is in agreement with. If
03:18 8 anyone disagrees, all they have to do is say, stop the job.
03:18 9 Everyone on the rig is empowered to do that, and they will do
03:18 10 so.

03:18 11 This is the test on the right -- I'm sorry. I
03:18 12 skipped ahead -- that was misinterpreted. When they set it up
03:18 13 to do it the second time, they found no flow on the kill line.
03:18 14 That's where you've got the green line coming to the top.
03:18 15 That's what they were looking for. They continued to have the
03:18 16 1400 psi on the drill pipe, and this is the test that the men
03:18 17 discussed at length and misinterpreted.

03:18 18 As I said, it was a collective and collaborative
03:18 19 decision. This is Randy Ezell's testimony about his
03:18 20 interaction with Jason Anderson around 5:30. He says here --
03:19 21 he was there, and it's with Jason: "And actually, one of the
03:19 22 last things I told him, I told Jason, there's so many people
03:19 23 swapping up. It wasn't lined up correctly as per the APD
03:19 24 anyway. I told him, stop the job -- as we would say at
03:19 25 Transocean, stop the job. Gather everybody included in this

03:19 1 negative test, get it lined up like you need it, make sure the
03:19 2 well-site leaders are on board, and go from there."

03:19 3 There were no dictators in this group. They
03:19 4 reached this decision in a collaborative way.

03:19 5 One of the Transocean men advanced this idea of
03:19 6 the bladder effect, and it was accepted by the BP well-site
03:19 7 leaders and other representatives of Transocean. This is the
03:19 8 testimony of Lee Lambert, who will actually appear here live
03:19 9 during this trial to describe this. Jason Anderson was, we
03:20 10 agreed, a very, very well-regarded member of the Transocean
03:20 11 team. He had been with the rig since it was put in service.
03:20 12 He has been described as one of the backbones of the Transocean
03:20 13 rig. He had a great deal of credibility with all of the men
03:20 14 there.

03:20 15 And this explanation that he gave that mud would
03:20 16 be transmitting through the annular and causing a differential
03:20 17 pressure in some way was accepted. It shouldn't have been, but
03:20 18 it was. But it was not a situation where people were trying to
03:20 19 rush. They were not in a hurry. They took several hours to
03:20 20 talk this through. They were being careful. Their lives were
03:20 21 at risk in terms of the interpretation of the test. They all
03:20 22 knew that. They counted on each other.

03:20 23 This is not a situation, as has been described
03:21 24 by Mr. Underhill and others, that reflects a want of care or an
03:21 25 intentional act to hurt someone or the environment. It was a

03:21 1 mistake. It was a mistake made by several men with two
03:21 2 different companies. They should not have accepted it. They
03:21 3 did. But it was a mistake. And this did contribute to the
03:21 4 accident. BP has agreed to that, as has Transocean, who says
03:21 5 their participation in this negative test was a proximate cause
03:21 6 of the outcome.

03:21 7 Everyone thought this test was a success. This
03:21 8 is Randy Ezell, the senior toolpusher. He talked to Jason
03:21 9 probably around 2108, 9:08, and Jason Anderson said,
03:21 10 "Everything is going great." If Jason had been railroaded by
03:22 11 BP into accepting a test he didn't like, we would see something
03:22 12 different than this right here, which is his communication to
03:22 13 Randy Ezell: "Everything is good. No, I got this. It's a
03:22 14 good bit. It's going good." This is what Jason says.
03:22 15 Collective, collaborative decision.

03:22 16 Now, there's been a lot of talk today,
03:22 17 Your Honor, about the Vidrine/Hafle call that took place that
03:22 18 evening. I would like to focus, Your Honor, just for a second
03:22 19 on the box at the bottom. What we know about the conduct of
03:22 20 the negative test from Vidrine and Hafle is what we learned in
03:22 21 the interviews as part of the internal investigation that BP
03:22 22 conducted. These notes were not intended to be verbatim. They
03:23 23 were not intended to be transcripts. So we are picking and
03:23 24 choosing lines and saying we know what they were thinking, we
03:23 25 know what happened, and we are pulling those different

03:23 1 statements out of interview notes that are made by engineers
03:23 2 conducting interviews.

03:23 3 But if we look at those notes and look for
03:23 4 consistency, here's what we find: There was a call at 8:52.
03:23 5 The call was to discuss the cement plug. Your Honor, that's
03:23 6 the -- if you go down 8300 feet, that's what would have been
03:23 7 set when they temporarily abandoned. Not the cement all the
03:23 8 way down at the bottom of the well but the cement plug. Hafle
03:23 9 asked how things were going, and Vidrine told Hafle he was
03:23 10 satisfied or comfortable with the test. This is what can be
03:24 11 gleaned in a consistent way from the interview notes.

03:24 12 Now, Your Honor was shown the top half of this
03:24 13 e-mail by a couple of the parties in presentations today. I
03:24 14 would like to focus on the second part. This is the Hafle
03:24 15 interview notes. Don, that's Don Vidrine, told Mark he was
03:24 16 fully satisfied that the rig crew had performed a successful
03:24 17 negative test. Mark said he didn't have the full context for
03:24 18 what had transpired during the tests and it wasn't clear to him
03:24 19 whether Don was talking about the first or the second negative
03:24 20 test. Don told him he watched the kill line for 30 minutes and
03:24 21 didn't see a drip come out of it. And so Mark assumed that Don
03:24 22 had concluded that it was not a problem.

03:24 23 That's the full context of those interview
03:24 24 notes. This is what we have to work with in this case. We
03:24 25 know from the testimony what happened on the rig. This is what

03:25 1 we know, this note and some others, about that telephone call,
03:25 2 but this does not reflect gross negligence, want of care,
03:25 3 intentional willful conduct. This is a conversation where
03:25 4 someone says we had an issue with the negative test and the
03:25 5 person who's receiving the information on shore is hearing that
03:25 6 the man on the rig, who was experienced and qualified, believed
03:25 7 that the crew had conducted a good test. That's the extent of
03:25 8 the communication that we know about on the negative tests.

03:25 9 This is the United States' drilling expert. I
03:25 10 will just focus the Court quickly on the second question -- or
03:25 11 answer.

03:25 12 **"QUESTION:** Do you believe that any of the men
03:25 13 involved in the negative pressure test had an incentive to
03:25 14 get the test wrong?

03:25 15 **"ANSWER:** I don't think they had an incentive. I
03:25 16 don't think it was done intentionally."

03:26 17 These people knew and respected each other.
03:26 18 They were trying to get it right. They were trying to do the
03:26 19 right thing. This is Mr. Heenan just confirming that the
03:26 20 operator has the final say on the test and that if the
03:26 21 contractor or any other party had a problem, they would voice
03:26 22 it.

03:26 23 Finally, the OIM, which is the top person in the
03:26 24 Transocean organization on the rig on the 21st, conveys that
03:26 25 Randy Ezell -- that he had talked to Randy Ezell just

03:26 1 10 minutes before the incident, and Randy conveyed that a
03:26 2 successful inflow pressure test had been conducted and that
03:26 3 there was no flow. This is the top person on the rig, and
03:26 4 testimony will place Jimmy Harrell in the drill shack when
03:26 5 discussions about the negative test were taking place.

03:27 6 So this is a model of the Transocean rig. I
03:27 7 just want to do a very quick, just tour down to an important
03:27 8 place on the rig, because I'm going to come back to this in
03:27 9 just a little bit. This comes right into where the drill floor
03:27 10 is. Your Honor, you can see the rotary table there, the
03:27 11 driller's cabin -- that's what Mr. Godwin was showing you just
03:27 12 a little bit ago -- and the drill floor. This is the center of
03:27 13 the universe as relates to this rig. The reason this rig is
03:27 14 here is for this rotary table right here, which sends the drill
03:27 15 pipe and other tools downhole to do the work of the rig. The
03:27 16 entire rig is there for this area right here.

03:27 17 This is the control center of the rig. You go
03:27 18 anywhere in the world, go to a rig, you will find a driller
03:27 19 sitting right there in that left chair with all of the
03:28 20 equipment and the resources of the rig right there available to
03:28 21 him at his fingertip.

03:28 22 This point has been shared. I think it is
03:28 23 understood. When we talk about roles and responsibilities on
03:28 24 the rig, the person who is responsible for monitoring the well
03:28 25 at all times is the driller. It's his responsibility to shut

03:28 1 in the well if a kick is indicated or suspected.

03:28 2 Detection of the kick is the responsibility of
03:28 3 the driller. It's the driller and the assistant driller who
03:28 4 work in that driller's cabin that we just looked at.

03:28 5 This just sort of makes the point kind of
03:28 6 graphically that well control is the responsibility of
03:28 7 Transocean, responsible, accountable for when things happen,
03:28 8 not an area where we wait to see what the company man wants to
03:29 9 do. Shut in the well, then seek advice.

03:29 10 Transocean's drill crew was aware that risks
03:29 11 continued after a cement job was declared successful. In their
03:29 12 well control handbook that they use throughout the world, they
03:29 13 say wells have been lost due to improperly designed cement
03:29 14 slurries and spacers. And as you were shown earlier, they
03:29 15 drilled on this very issue two days before the event occurred.

03:29 16 There is never a time, Your Honor, in the life
03:29 17 of the well when a driller or an assistant driller can let
03:29 18 their guard down. They are to be always vigilant. This makes
03:29 19 the point as well as could be said.

03:29 20 **"QUESTION:** Is there every a time during the life of
03:30 21 the well between drilling or temporary abandonment or some
03:30 22 other stage of the well that you believe that you could
03:30 23 pay less attention to monitoring a well?

03:30 24 **"ANSWER:** No, not in my book."

03:30 25 That's the industry standard, Judge. If you

03:30 1 were to go up to a driller, find one coming in from offshore,
03:30 2 and ask him it's okay -- is it okay for you to let your guard
03:30 3 down, don't you let your guard down at certain times, they
03:30 4 would be insulted by that. They understand it's their
03:30 5 responsibility to continuously monitor the well. They all do.

03:30 6 Now, I want to turn to the sequence of events
03:30 7 that led to the blowout. This slide is a little busy. You
03:30 8 will be looking at a lot of these during the course of the
03:31 9 trial, but I want to focus you now on the figure on the left
03:31 10 where you can see the 2108 time and it shows 40 barrels of
03:31 11 hydrocarbon influx by 2108. I want to describe for you what
03:31 12 happened.

03:31 13 At 2052, they slowed the pumps a bit. We know
03:31 14 from the post-incident modeling that at 2052, 8:52, the well
03:31 15 began to flow. There is a very slight pressure increase that
03:31 16 occurs, not detectable, we don't think, from 2052 to about
03:31 17 9:00. But then at 2101, something very significant happens,
03:31 18 Your Honor. The drill pipe pressure reverses.

03:32 19 So what's happening in the well during this
03:32 20 period of time is that mud in the riser is being displaced with
03:32 21 seawater such that the pressure should be declining. This red
03:32 22 number should be declining. So this is the period right here,
03:32 23 2101 to 2108. And during that period of time, there is a
03:32 24 100-psi increase.

03:32 25 This is a significant anomaly in the well.

03:32 1 There is agreement about this particular point from the
03:32 2 experts. This is Billy Dean Ambrose, who conducted the
03:32 3 Transocean investigation. We'll look at the top question.

03:32 4 "QUESTION: Perhaps the first indicator was at
03:32 5 approximately 901 or 902, after establishing a constant
03:32 6 pump rate, the drill pipe pressure begins to increase,
03:32 7 which shouldn't have happened?"

03:33 8 And he acknowledges, yes, there's a slight
03:33 9 increase, and then the next answer:

03:33 10 "ANSWER: With hindsight, we know that is a kick
03:33 11 indication. We acknowledge he did not recognize that as a
03:33 12 kick."

03:33 13 This is the expert of the United States. 2101
03:33 14 to 2108, circulation continued at a further reduced rate.

03:33 15 Look down below. The increasing trend is
03:33 16 apparent on the full screen, 0 to 7500-psi Hitec display,
03:33 17 proposed by Transocean -- this is in its internal investigation
03:33 18 report -- and even on the 0 to 5000-psi scale, the anomalies
03:33 19 needed to be investigated but tragically were not.

03:33 20 This is 9:01 to 9:08, a significant anomaly that
03:33 21 should have been caught. We have a 40-barrel influx, twice a
03:34 22 red zone kick. By this point in time, it's still another hour
03:34 23 or so before there's going to be an explosion.

03:34 24 This is Joe Keith. He says if he had seen a
03:34 25 100-psi increase, he would have acknowledged that as

03:34 1 significant.

03:34 2 This shows what we have been talking about. By
03:34 3 9:08, 40 barrels had entered the well, and it talks about
03:34 4 what's reasonable under the Transocean standards.

03:34 5 Now, a second very important event occurs at
03:34 6 2108. You have heard us discuss today that there was -- in the
03:34 7 well, they're pumping out the spacer. And when the spacer
03:34 8 comes back to the rig, what they do, Your Honor, is that they
03:34 9 shut down the pumps to conduct what is known as a sheen test.
03:35 10 Because if the spacer is back, then they can begin to discharge
03:35 11 that fluid overboard. They turned the pumps off to do the
03:35 12 sheen test.

03:35 13 Now, here's an important piece of -- important
03:35 14 thing to understand about drilling. When the pumps are off, if
03:35 15 you are not pumping anything into the hole, your pressure
03:35 16 should not be increasing. It should not be changing in any
03:35 17 way, but it certainly should not be increasing. So in this
03:35 18 critical period of time when the pumps are off and nothing
03:35 19 should be happening, there is a very significant anomaly that
03:35 20 should have been detected by the crew but was not.

03:35 21 With the pumps off, the flow continues and the
03:35 22 drill pipe pressure continued. It increased by over 250-psi.
03:35 23 This was the second significant anomaly.

03:35 24 This is recognized by Billy Dean Ambrose and
03:36 25 it's recognized by Richard Heenan. We will also have experts

03:36 1 that will testify to this. I wanted to show you what others
03:36 2 are saying so that you can see that there is consensus that
03:36 3 these are missed indications of a well flowing and that the
03:36 4 well should be shut in.

03:36 5 Heenan says: "Very significant. The pump's
03:36 6 off. This is an almost certain indicator of a kick."

03:36 7 Then we start to enter the crucial period of
03:36 8 2130, 2131, to the time of the blowout. By 2131, the crew has
03:36 9 missed an approximately 300-barrel hydrocarbon influx. There
03:36 10 is a massive kick under way at the Macondo well. It has not
03:36 11 been detected.

03:36 12 At this point they do notice that there's
03:37 13 differential pressure; that is, the pressure in the kill line
03:37 14 and the pressure in the drill pipe are different. They send
03:37 15 someone not to conduct a well control event but to bleed off
03:37 16 the pressure. That's not good well control practice. You
03:37 17 don't open the drill pipe if the well is flowing. It's not a
03:37 18 well control step.

03:37 19 It's not too late to shut in the well,
03:37 20 Your Honor. They have plenty of time now to shut in the well.
03:37 21 They know there's an issue. What is demanded at this point and
03:37 22 has been demanded at other points in time, but what is clearly
03:37 23 demanded now is what's called a *flow check*.

03:37 24 This talks about the pumps being shut down at
03:37 25 9:30. And this is Calvin Barnhill, the expert for Transocean.

03:38 1 **"QUESTION:** It's your opinion that once the rig pumps
03:38 2 were shut down at 2131, that a manual flow check followed
03:38 3 by an immediate shut-in at the Macondo well should have
03:38 4 occurred?

03:38 5 **"ANSWER:** Yes."

03:38 6 It only takes a minute, two minutes at the most,
03:38 7 to shut in the well. They had the opportunity to do it here.
03:38 8 Even Calvin Barnhill, Transocean's expert, acknowledges that
03:38 9 this accident could have been averted if they had done this.

03:38 10 What is a flow check? What needs to be done?
03:38 11 Heenan says the same thing. In the interest of time, I'm just
03:38 12 going to keep going.

03:38 13 This is a drill shack. I'm just going to go
03:38 14 right over to what needed to be done at this point in time,
03:38 15 Your Honor. Coming over here, sitting in the drill shack, you
03:38 16 are looking right there to the rotary table. All the driller
03:38 17 has to do is either go out himself or send someone right to
03:38 18 that rotary table with a flashlight. You look down the rotary
03:39 19 table. At that point in time, the well would have been
03:39 20 flowing. They would have known the well was flowing. All they
03:39 21 had to do was shut it in.

03:39 22 The other thing that he can do right here at
03:39 23 2131 -- could have done it earlier, too -- 2131, he can pick up
03:39 24 the phone, he can call a shaker hand, he can call someone and
03:39 25 say, "Check for flow." If they do that, we are not here today.

03:39 1 This is a significant failure in well control, missing these
03:39 2 three incidents.

03:39 3 Now, finally, at about 2141, the annular
03:39 4 preventer is activated, but it fails to seal the well.

03:39 5 At 2147, the VBR has fully sealed the well. You
03:39 6 can see that at 2149, you have a cumulative gain of
03:39 7 2,000 barrels.

03:40 8 The failure to shut in the well quickly in
03:40 9 response to the kick and to shut it in safely was one of the
03:40 10 contributing causes of the accident. Billy Dean Ambrose of
03:40 11 Transocean affirms that. The driller must shut in the well if
03:40 12 he has any doubt. Mr. Godwin has shared those with you.

03:40 13 If the anomalies of flow had been observed,
03:40 14 interpreted correctly, and acted upon, the events of April 20th
03:40 15 would have been avoided.

03:40 16 We have talked in a good bit of detail about the
03:40 17 mud/gas separator. Your Honor, there are 14-inch pipes that
03:40 18 are designed to take flow overboard in the event of emergency
03:40 19 to allow well control activity to intervene and shut in the
03:40 20 well. In this particular case, that panel is right in the
03:41 21 driller's shack. The wrong diversion occurred. They sent the
03:41 22 gas and the mud to the mud/gas separator, and that's what
03:41 23 caused it to come back onto the rig and be an ignition source.

03:41 24 If they had followed their policy of any time
03:41 25 there being rapid expansion of gas in the riser, the diverter

03:41 1 must be closed and the flow diverted overboard, we would have
03:41 2 had a very different outcome than what we had.

03:41 3 So that's the well control sequence, and it's
03:41 4 part of the reason that we are here today. It's not the only
03:41 5 reason, but it's certainly a significant reason that we are
03:41 6 here. Three significant anomalies were missed by the
03:41 7 Transocean crew. We have the data available, the real-time
03:41 8 data that was generated from the rig on that day.

03:41 9 We have heard from Transocean's counsel today
03:42 10 that we don't know precisely what the men saw. We don't know
03:42 11 precisely what they discussed. That's true because,
03:42 12 unfortunately, they are deceased; and our sympathy is certainly
03:42 13 with the families of those who lost loved ones. But it's clear
03:42 14 that mistakes were made in the interpretation of the data and
03:42 15 the failure to shut in the well, and there's agreement about
03:42 16 that in the drilling community.

03:42 17 Now, why did the blowout preventer fail to shut
03:42 18 in the well? Let me just walk through this quickly with
03:42 19 Your Honor. This just basically shows the pictures that you
03:42 20 have seen today. It is a massive piece of equipment. I think
03:42 21 your Honor has been out to see it. It's really quite
03:43 22 spectacular just to look at a blowout preventer, a very
03:43 23 complicated piece of equipment. This shows the orientation of
03:43 24 the preventers and the rams, and I think probably several of
03:43 25 the parties will give you copies of things like this so you can

03:43 1 help follow what was activated and when.

03:43 2 This is what I want to focus on right here,
03:43 3 which is the industry standard for the emergency systems. So
03:43 4 there are four emergency systems that are associated with this
03:43 5 BOP. There's an emergency disconnect, which can be activated
03:43 6 from the bridge of the drill floor, designed to shear, seal the
03:43 7 well, and disconnect the vessel from the well. This should
03:43 8 have been activated. It would have saved lives. It would have
03:43 9 saved people from injuries. It would have saved the
03:43 10 environment. But it was not done in a timely fashion, as we
03:43 11 have just seen in the well control system.

03:44 12 But there are backup systems that go with this
03:44 13 BOP. The AMF/deadman closes the BSRs, the blind shear rams,
03:44 14 when communication is lost with the rig. Closure time is
03:44 15 37 seconds. This is what I was referring to in my opening
03:44 16 comments. When there was an explosion on the rig, the MUX
03:44 17 cables, the communication cables from the rig that go down the
03:44 18 riser to the BOP, were destroyed in the explosions. So
03:44 19 communication between the rig and the BOP was lost.

03:44 20 Unfortunately, as we'll see in a second, there
03:44 21 were maintenance issues that prevented this AMF/deadman from
03:44 22 functioning, and I'm going to show your Honor what those were.

03:44 23 Then there's an auto shear function that
03:44 24 actually can be done in a number of different ways, and there
03:45 25 are ways to intervene with an ROV. And both of these

03:45 1 techniques were attempted.

03:45 2 It is Transocean's responsibility to maintain
03:45 3 the well control equipment in accordance with good oilfield
03:45 4 practices at all times and use reasonable means to control and
03:45 5 prevent fires and blowouts. From the top of the company, Steve
03:45 6 Newman, to the guy on the rig, Transocean recognizes that they
03:45 7 are responsible for ensuring well control equipment could
03:45 8 operate safely.

03:45 9 This BOP was approved by MMS for drilling
03:45 10 operations -- I believe it was over 40 times. They looked at
03:45 11 the configuration. They looked at the testing on it. They
03:45 12 were very in tune to the capability of the BOP, and they
03:45 13 approved it time after time.

03:45 14 Here's the time line that I hope will be helpful
03:45 15 to Your Honor about the last few minutes before the explosions.
03:46 16 The mud overflowed on to the rig at about 9:40. There was an
03:46 17 annular closed on a tool joint. The tool joint was lodged in a
03:46 18 place right in the upper annular -- you can see it there -- and
03:46 19 did not allow for the closing-in of the well. The EDS, which
03:46 20 is available on the bridge as well as in the drill shack, was
03:46 21 not activated at this time. The EDS is the one that activates
03:46 22 the blind shear ram, which actually cuts the pipe and allows it
03:46 23 to drop down.

03:46 24 At 2142, the bridge notified the *Damon Bankston*
03:46 25 to move away. Mud is falling down, raining down on the

03:46 1 *Damon Bankston*. They try to close a couple more VBRs. Still
03:46 2 don't activate the EDS and close-in the well.

03:46 3 At 2149, we have explosions and that's what I
03:46 4 have just described to you with the MUX cables severed.

03:47 5 The conditions of the AMF/deadman were met but
03:47 6 did not work for these two issues. There was a solenoid on the
03:47 7 yellow pod that was miswired. And as you can see in the bottom
03:47 8 left there, where it says *Table 5*, there was a blue and yellow
03:47 9 pod that -- a blue pod that had dead batteries.

03:47 10 Here's what we know about that: On February 16,
03:47 11 2010, Transocean was notified that Cameron recommended
03:47 12 replacing those batteries after one year on time at operation.
03:47 13 That is in the blue pod, Your Honor.

03:47 14 Here's a note, after they spent a couple weeks
03:47 15 looking for the records: "The batteries in the SEMs have been
03:47 16 replaced as follows: The last time the blue pod battery was
03:47 17 replaced was November 2007" -- some 2 1/2 years before the
03:48 18 incident. The No. 3 pod was the blue pod.

03:48 19 This shows the yellow pod. This was actually
03:48 20 pulled up during the response in May, and they could not get
03:48 21 the yellow pod to work. Later, they determined that it was
03:48 22 this wiring issue that we are showing here.

03:48 23 Even more significant, Transocean did not test
03:48 24 the AMF/deadman as it was required to do. So just one more
03:48 25 issue here and then we will move on and talk about cement a

03:48 1 little bit.

03:48 2 As you can see here, the time line of events
03:48 3 begins around 2140, and this is what we just looked at. At
03:48 4 2155, Chris Pleasant comes to the bridge, and when he arrives
03:49 5 at the bridge, there's fire. The rig is burning. The captain
03:49 6 of the Transocean vessel has still not hit the EDS.

03:49 7 "QUESTION: When you went to the bridge, you informed
03:49 8 the captain that you were going to activate EDS?

03:49 9 "ANSWER: Yes.

03:49 10 "QUESTION: And he indicated he didn't want you to
03:49 11 activate EDS yet?

03:49 12 "ANSWER: That's correct."

03:49 13 Well, Chris Pleasant said, "To heck with that."
03:49 14 He hit the EDS button on the bridge, but it was too late. It
03:49 15 was too late because communication had been lost.
03:49 16 Captain Kuchta, as the master of the vessel, who was on the
03:49 17 bridge, did not take control of this situation and EDS when he
03:49 18 should have, and we will talk about that in the case.

03:49 19 Here's what caused the drill pipe to bend.
03:50 20 2255, the traveling block -- which is on the rig -- about
03:50 21 30 minutes after the explosion, falls. It's 190,000 pounds.
03:50 22 It drops about 27 feet. When it does, the downward force from
03:50 23 the falling traveling block buckles the drill pipe in the BOP.

03:50 24 This just shows you that. It tries to, anyway.

03:50 25 Then, on April 22, they were able to activate

03:50 1 the auto shear pin, and when they did, the drill pipe, as you
03:50 2 can see here, is now off-center because of the drop of the
03:50 3 traveling block and it did not fully shear the drill pipe. And
03:50 4 that's the last step in the BOP sequence.

03:51 5 Now let's turn to cement for just a few more
03:51 6 minutes. I think as -- I want you to have a thought about
03:51 7 Jesse Gagliano. We have talked about him a lot today. You
03:51 8 should think of him as a guy in a red coat in a sea of green.
03:51 9 He was a Halliburton account representative. He was assigned
03:51 10 to BP, and he worked in the BP offices. He didn't work at the
03:51 11 Halliburton offices. He was at BP and he was there for one
03:51 12 reason and one reason only and he describes it right here: "My
03:51 13 whole purpose for being with BP was to make cement
03:51 14 recommendations for BP.

03:51 15 We counted on Halliburton to use their
03:51 16 proprietary materials to suggest a formula that would work, to
03:52 17 test it in their labs, and to pump it in an appropriate way.
03:52 18 And there can be no dispute about that. Jesse Gagliano resided
03:52 19 and worked at our offices to give us advice about cement, to
03:52 20 tell us what would work.

03:52 21 We have talked about contract provisions today.
03:52 22 Jesse worked at BP as an independent contractor. We did not
03:52 23 exercise control, supervision, management, or direction as to
03:52 24 the method and manner of obtaining the results required. That
03:52 25 was up to Halliburton to do. The results that were required

03:52 1 was a foam cement that would work and we didn't get that.

03:52 2 This demonstrates how we were relying on Jesse
03:53 3 Gagliano to tell us if a foam cement would work in this well.
03:53 4 "Can we put cement across the zone to be perforated during
03:53 5 completion?" This is our engineer writing to Jesse.

03:53 6 He tells us: "Yes. We have done this on
03:53 7 several wells. This has been done in the past with success.
03:53 8 We can do that."

03:53 9 This is Jesse's testimony about the Kodiak
03:53 10 blend. There's been a lot of fussing and fighting in this case
03:53 11 about who wanted to use the Kodiak blend. I just want it to be
03:53 12 clear to Your Honor so when we get to it later. Jesse Gagliano
03:53 13 said he had no concern with foaming the system that contained
03:53 14 this chemical we are talking about, D-Air 3000. He recommended
03:54 15 that system to BP, and he recommended the formula that was
03:54 16 utilized for the Macondo cement. This was Jesse's
03:54 17 recommendation straight across the board.

03:54 18 Now, you have seen that the formula that he
03:54 19 suggested contained D-Air 3000. These are the executives of
03:54 20 Halliburton talking about whether or not it's a good idea to
03:54 21 put a defoamer in a foam cement and they say, to a person, "I
03:54 22 would redesign the slurry without the D-Air 3000."

03:54 23 **"QUESTION:** I'm asking you, though, does it concern
03:54 24 you as a lab man that the D-Air was present in this
03:54 25 recipe, even though Halliburton's best practices

03:54 1 recommended against having D-Air in a foam slurry recipe?

03:55 2 "ANSWER: Yes, it would concern me."

03:55 3 And Phyllis Stelly is: "I wouldn't have D-Air
03:55 4 in that type slurry."

03:55 5 They have put an ingredient in there that does
03:55 6 something different than the desired effect.

03:55 7 These are their manuals that they have
03:55 8 internally where they say the defoamer should not be
03:55 9 included -- it's done in red to make it quick -- in actual job
03:55 10 designs. Avoid using dispersants or defoamer additives. Do
03:55 11 not use defoamers, D-Air foamers. Why do they say that? These
03:55 12 materials will destabilize the foam.

03:55 13 So this is the issue with Halliburton's proposed
03:55 14 slurry, it has an ingredient that will not allow the cement to
03:56 15 do what it's designed to do.

03:56 16 Now, this chart will probably make your head
03:56 17 spin just a little bit and I apologize for that, but I think
03:56 18 that this is something that will be helpful to all of us -- at
03:56 19 least to me -- as we go through the case. There are a number
03:56 20 of important points I would like to make about this chart so
03:56 21 Your Honor has awareness of the testing that was done on the
03:56 22 Halliburton cement slurry.

03:56 23 The four tests in gray at the top are
03:56 24 pre-incident foam stability tests that were conducted by
03:56 25 Halliburton. You're looking for two things -- two primary

03:56 1 things when you are looking at these test results, Your Honor.
03:56 2 Do you see the second column which says "Foam Stability Test"?
03:56 3 You want to see that the top -- the left number, 16.8, is the
03:57 4 same as the right number, 17.6. If it's not, then your air is
03:57 5 breaking out of the -- out of the foam. It's settling, and
03:57 6 it's not stable. So you want to see that those two numbers are
03:57 7 the same.

03:57 8 The other thing that you want to see is that you
03:57 9 want to see that you're meeting your target density. So if you
03:57 10 see at the top, you have 14.5 ppg is the target density.

03:57 11 They conduct a test on February 12, 16, 13, and
03:57 12 17; and in all of them, the result is unstable.

03:57 13 The middle column is a test that was designed to
03:57 14 be conducted on April 18 on the actual slurry design that was
03:58 15 pumped and we didn't know this until well after the event, but
03:58 16 we know now that Halliburton never tested the foam cement that
03:58 17 was pumped into the well. This is their -- from their press
03:58 18 release. A foam stability test was not conducted on the
03:58 19 9-gallon formulation. They did not test the precise formula
03:58 20 they pumped into the well.

03:58 21 Next, the three boxes at the bottom reflect the
03:58 22 only tests that we know of that Halliburton has conducted since
03:58 23 the incident. In the first one, Ronnie Morgan was requested to
03:58 24 conduct a test using the Macondo formula. The slurry would not
03:59 25 foam. Morgan destroyed the test because he was afraid they

03:59 1 would be misinterpreted by the lawyers.

03:59 2 They then said, Well, let's ramp it up a little
03:59 3 bit. Let's change the conditioning time. And so you see here
03:59 4 they changed the conditioning time for a couple of tests to
03:59 5 three hours.

03:59 6 These tests, Your Honor, were also conducted in
03:59 7 what they describe as being *on the side*. They claim that
03:59 8 they're stable, but we don't have the cement and we don't have
03:59 9 the results. We don't have anything from these tests.

03:59 10 Now, one important point: Three hours
03:59 11 conditioning time that you see here that they employed to
04:00 12 supposedly get a successful test result is not like the
04:00 13 conditions on the rig. *Conditioning time* means taking the
04:00 14 slurry and mixing it at a very high temperature. When you do
04:00 15 that, it becomes thicker; and when it's thicker, it's more
04:00 16 likely to be able to entrain or hold on to the air or the
04:00 17 nitrogen.

04:00 18 On the rig, that doesn't happen. They don't
04:00 19 heat it up on the rig. They don't condition it on the rig.
04:00 20 It's basically mixed. There's a period of 15 or 20 minutes
04:00 21 that it takes to get from the mixer to when it's pumped
04:00 22 downhole when it's injected with nitrogen, but the conditions
04:00 23 are not similar. We don't believe that the testing of the
04:00 24 Halliburton cement demonstrates that it was stable.

04:00 25 What's the goal with foam cement? What you are

04:00 1 trying to do -- because you have a fragile formation -- is you
04:01 2 are trying to create a cement slurry that will occupy the same
04:01 3 volume but weigh less. That's the idea of injecting the
04:01 4 nitrogen into the foam. But if it settles or if it breaks out,
04:01 5 then your cement doesn't end up where it's intended. It
04:01 6 doesn't end up where it's intended and you don't have a good
04:01 7 cement job and that's what we believe happened here.

04:01 8 This relates to the April 13 and April 17 foam
04:01 9 stability test and this is Glen Bengel from the United States
04:01 10 and he says clearly he likes to see a density closer to the
04:01 11 design density. The April 17 test did not meet the Glen Bengel
04:01 12 standard for stability. This is an expert you will be hearing
04:02 13 from.

04:02 14 If we go back to the April 17 test and we look,
04:02 15 Your Honor, right here, you see the density is met, 15, 15.
04:02 16 Those are comparable. That's a good thing, but what you have
04:02 17 missed up here is your target density. And that's a
04:02 18 significant difference in the context of this test, and that's
04:02 19 why Mr. Bengel says it doesn't meet the test.

04:02 20 Now, there's been lots of post-incident testing
04:02 21 on cement, some tests with samples that were purchased
04:02 22 commercially that were thought to be like the Halliburton
04:02 23 samples, some with stock samples from Halliburton, and at least
04:02 24 one test on a rig sample. You will have in evidence the
04:02 25 results of these tests, and this describes here what these

04:03 1 different entities looked at.

04:03 2 The post-incident testing in all three
04:03 3 categories of testing that I have just described do not
04:03 4 demonstrate that the cement was stable. They do not.

04:03 5 This is the OTC test conducted for the JIT or
04:03 6 the test results on the Macondo rig sample. You can see here a
04:03 7 couple of significant findings. One, there's 6 milliliters of
04:03 8 void space. I don't know how to say it other than that's a bad
04:03 9 thing.

04:03 10 There's bubble breakout right here. So the
04:03 11 cement that was tested is not going to occupy the volume in the
04:03 12 well that is desired when the cement is pumped downhole.

04:04 13 We asked Jesse Gagliano:

04:04 14 **"QUESTION:** If you have an inherently unstable foam
04:04 15 cement by design -- like we have here, the design itself
04:04 16 rendered it unstable -- was there anything BP could do
04:04 17 operationally to turn an unstable foam cement into a
04:04 18 stable foam cement?

04:04 19 **"ANSWER:** I don't believe so."

04:04 20 Now, Your Honor has heard about a number of
04:04 21 theories that have been advanced by Halliburton as to why it's
04:04 22 just not possible that it was their cement; it had to be
04:04 23 something else. I call it the ABCs, *anything but cement*.

04:04 24 What we see here is really the way the men
04:04 25 interacted, not the way we argue about things here, but how the

04:04 1 men interacted. This is Jesse Gagliano saying:

04:05 2 "QUESTION: Before BP gave the green light to pump
04:05 3 the foam cement job on the Macondo well, if there were any
04:05 4 safety issues associated with that cement job, as the
04:05 5 trusted adviser to the BP team, do you believe that the BP
04:05 6 team could trust you to bring those safety issues to their
04:05 7 attention if you were aware of them?"

04:05 8 "ANSWER: I would think they would. I would bring
04:05 9 that to their attention."

04:05 10 Jesse Gagliano never said, don't pump this
04:05 11 cement; the centralizers aren't right. Don't pump this cement;
04:05 12 we haven't done full bottoms up. Don't pump this cement for
04:05 13 any other reason.

04:05 14 He believed, based on what he knew about the
04:05 15 cement and the job, that he had recommended something
04:05 16 appropriate.

04:05 17 Here he says, on the issue of the centralizers,
04:05 18 something you have already seen in an email and I would just
04:05 19 like to focus you, for the sake of time, on the second question
04:05 20 and answer.

04:06 21 "QUESTION: Isn't it a fact that you thought the only
04:06 22 risk associated with channeling before the explosion was
04:06 23 remedial work?"

04:06 24 "ANSWER: Yes. I was concerned we would have to go
04:06 25 back and perform remedial work. I did not consider

04:06 1 channeling a safety issue. It's a risk of remedial work
04:06 2 after the fact."

04:06 3 This is not something they were looking at as
04:06 4 something that was going to cause a blowout.

04:06 5 The same thing about this issue of full bottoms
04:06 6 up. He did not consider that a safety risk. The decision to
04:06 7 spot a heavy pill -- these are operational decisions, not
04:06 8 safety. The decision not to run a CBL, didn't look at that as
04:06 9 a safety risk.

04:06 10 Kim, would you pull up a couple of my responsive
04:06 11 slides. I apologize. Just take it back to where I was. I'm
04:07 12 sorry.

04:07 13 So just briefly on this, Your Honor, one of the
04:07 14 things that we will be asking you to look at as you look at
04:07 15 this case is there's a lot of background noise in the case
04:07 16 about engineering decisions that were made by BP. In almost
04:07 17 every case, the criticism is not well-founded. BP had good
04:07 18 engineering reasons for making its decisions. BP was
04:07 19 proceeding within the standard of care.

04:07 20 But in addition to that, one of the things you
04:07 21 will be asked to decide, Your Honor, is: Well, I hear you on
04:07 22 that criticism, Mr. Godwin, or I hear you on that criticism,
04:07 23 Mr. Roy, but really was that causal? Did it have anything to
04:07 24 do with the blowout?

04:07 25 And this is a good place to talk about this

04:08 1 particular issue. Because what we are showing here is,
04:08 2 Your Honor, the path of flow. This was determined by BP as
04:08 3 part of the internal investigation report that it did, and what
04:08 4 it shows is it has flow coming out of the reservoir. It goes
04:08 5 down and then up the shoe track, right up the casing. BP has
04:08 6 said from the beginning, in terms of understanding the
04:08 7 investigation, that this was the flow path.

04:08 8 Why is that important? Well, from the
04:08 9 beginning, Transocean has contended -- excuse me, Halliburton
04:08 10 has contended that flow was up this way, was up what's called
04:08 11 *the back side*. They have given a lot of different versions of
04:08 12 how they said the flow occurs. The cartoon that Mr. Godwin
04:08 13 showed today of the twisted-up pipe at the bottom, that's about
04:09 14 their sixth theory, just to be very honest about it. I won't
04:09 15 show you all of them today, but they have had lots of theories
04:09 16 on flow.

04:09 17 What they are designed to do is to say, "It
04:09 18 couldn't have been our cement because we poured a good cement
04:09 19 job. It could not have been this. So flow must have been this
04:09 20 way. Must have lifted off the casing hanger right here and
04:09 21 then gotten up into the well." That was their theory early on.
04:09 22 Unfortunately for them, the evidence didn't hold on that.

04:09 23 When the well was recovered -- that is, the
04:09 24 production casing was taken out and recovered, the one on the
04:09 25 right, the 13th, it's pristine. There's not a bit of damage to

04:09 1 this hanger casing, this well casing right here. No damage to
04:09 2 it. Halliburton's theory that centralizers were causal was
04:10 3 disproved by the work that was done establishing flow, because
04:10 4 centralizers only matter if the flow is going up the back side.

04:10 5 In addition, on the left there was a
04:10 6 production -- the production casing was perforated; that is,
04:10 7 they were able to look outside the casing to the back side of
04:10 8 the casing, and they could see -- they could test and determine
04:10 9 there was no gas in the annulus, there was no gas on the
04:10 10 outside. Again, further evidence that Halliburton's theory of
04:10 11 flow up the back side caused by centralizers was not valid.

04:10 12 So they have offered some other things along the
04:10 13 way. There's some intermediate steps between annulus flow and
04:10 14 what they have shown you today.

04:10 15 But I just want to make this point. We have
04:10 16 talked to Gene Beck, the Halliburton expert, and we asked him:

04:11 17 **"QUESTION:** Do you think that the placement of the
04:11 18 centralizers was causal to the accident?

04:11 19 **"ANSWER:** No."

04:11 20 I want to step back now to some of the arguments
04:11 21 that have been made about some of the BP conduct and just cover
04:11 22 a couple of things here very quickly.

04:11 23 You were shown a couple of times an e-mail where
04:11 24 John Guide is raising the issue about his authority and is he
04:11 25 confused and is he getting along with David Sims. What we

04:11 1 haven't shown you yet and what I would like to just review
04:11 2 quickly with you now is the rest of the story.

04:11 3 There was an e-mail where John Guide was
04:11 4 frustrated with Sims. He was questioning his authority. But
04:11 5 if you look at the entirety of the e-mail -- and we will show
04:11 6 you this during the trial -- you will see that Sims and Guide
04:12 7 work through it. Sims describes to Guide what his authority
04:12 8 is. And the last e-mail, that you weren't shown, is that Guide
04:12 9 says, after these issues are raised and he has clarity about
04:12 10 it, he totally concurs: "I told him we will all work through
04:12 11 it together."

04:12 12 And they did. They continued to work in a
04:12 13 constructive way.

04:12 14 The language of *flying by the seat of the pants*
04:12 15 was raised with Your Honor, and this is a note that was offered
04:12 16 by John Guide. He leads the well-site leaders who are on the
04:12 17 rig. He has been in communication with them, and he is
04:12 18 describing here why he uses this language.

04:12 19 He said: "Earlier that morning I talked to Don
04:12 20 Vidrine and asked him how things were going. And I had
04:12 21 mentioned to him that I knew that there had been a lot of
04:13 22 last-minute changes of equipment."

04:13 23 As I think Your Honor is aware, getting things
04:13 24 to and from the rig is one of the primary responsibilities of
04:13 25 the well-site leader, scheduling what's coming out on the

04:13 1 boats, what's going back on the boats, what's coming out on the
04:13 2 helicopters. The well-site leaders were frustrated because
04:13 3 there were changes being made to what was going out and what
04:13 4 was coming back, and it was related to design issues. They
04:13 5 wanted to do things more efficiently.

04:13 6 "So Don makes the point -- he is a man of very
04:13 7 few words, very low key, just said to me, 'You know, keeping
04:13 8 track of -- getting all the equipment and these people to the
04:13 9 rigs, it sort of makes you feel like you're flying by the seat
04:13 10 of your pants.'"

04:13 11 "I said: 'Well, I understand there's a lot of
04:13 12 boat logistics,' and then just said, 'It's something we do all
04:13 13 the time, and we'll get it done.'"

04:13 14 This was not a safety issue. This was not a
04:13 15 "the rig is about to blow" issue. This is a well-site leader
04:14 16 expressing to his well's team leader that he is frustrated
04:14 17 about logistical issues, but it is not a safety issue,
04:14 18 Your Honor.

04:14 19 "Who cares." This is the "who cares" statement
04:14 20 that has been read to you several times. I would like to put
04:14 21 this in context, especially focusing on the second paragraph.

04:14 22 This is from Cocalles to Morel, and he says:
04:14 23 "Who cares. It's done. End of story. We'll probably be fine.
04:14 24 We'll get a good cement job."

04:14 25 And then he says: "I would rather have to

04:14 1 squeeze than get stuck above the wellhead. So Guide is right
04:14 2 on the risk/reward equation."

04:14 3 What does that mean really? In the context of
04:14 4 the centralizer issue, the centralizers can cause damage as
04:14 5 they go down. If they do, you're out of service. Your BOP can
04:14 6 be out of service. So one of the balancing issues that has to
04:15 7 occur as an engineering decision is what's the risk of using
04:15 8 the centralizers to the wellhead, to the BOP apparatus, versus
04:15 9 do you need the centralizers downhole.

04:15 10 We know here centralizers were not causal. We
04:15 11 also know here, Your Honor, that when Halliburton inputted the
04:15 12 information to evaluate the OptiCem, they put the wrong
04:15 13 information in. They didn't have the centralizers spaced
04:15 14 right. They didn't use the right pore pressure. They didn't
04:15 15 use the right centralizer diameter.

04:15 16 We will show you something in trial where the
04:15 17 centralizers they modeled wouldn't touch the side of a wall.
04:15 18 As a result of that, their prediction about a gas flow
04:16 19 potential was too high.

04:16 20 **THE COURT:** You've got a different clock keeper than
04:16 21 mine, but I will go with yours.

04:16 22 **MR. BROCK:** Let me just wrap up with this. M57B,
04:16 23 Mr. Godwin said you are going to hear about that a lot in the
04:16 24 case. Gene Beck, his expert, says:

04:16 25 **"QUESTION:** Do you believe M57B zone was causal of

04:16 1 the blowout?

04:16 2 "ANSWER: No."

04:16 3 I'll move on past this. Well, I guess I will
04:16 4 just say this with my one minute left: One of the important
04:16 5 issues here, as we understand it, is this issue of willful
04:16 6 misconduct and gross negligence. These are very high
04:16 7 standards. We do not believe that the men and women of BP
04:17 8 acted in a way that demonstrates willful misconduct, that they
04:17 9 were doing things voluntarily, intentionally, recklessly.

04:17 10 We do our jobs well. We hope we are able to get
04:17 11 that over to you during the course of this trial. It was a
04:17 12 multiparty, multicausal event. There are a number of different
04:17 13 reasons that we have this horrific outcome, but the standards
04:17 14 are very high.

04:17 15 If we look at the causes, if we just summarize
04:17 16 why the blowout occurred, foam cement with defoamer was
04:17 17 unstable, allowed the well to flow. The negative test was
04:17 18 misinterpreted by the team on the rig. At least three
04:17 19 indications of a kick were missed. They failed to divert
04:17 20 overboard in a timely way. A massive 700-barrel inflow had
04:17 21 occurred before any recognition that anything was going on.
04:18 22 And we have the blowout preventer issues that we've talked
04:18 23 about, including activation and maintenance.

04:18 24 So with that, Your Honor, I know I'm at the end
04:18 25 of my time. I thank you. Our team and I, we look forward to

04:18 1 presenting our case to you over the next few weeks. Thank you.

04:18 2 **THE COURT:** Thank you, Mr. Brock.

04:18 3 For Cameron, Mr. Beck.

04:19 4 **MR. BECK:** May it please the Court. David Beck for
04:19 5 Cameron International Corporation.

04:19 6 In 2001, more than 11 years ago, Cameron
04:19 7 manufactured and sold the blowout preventer for use on the
04:19 8 *Deepwater Horizon*. During the course of this evidence,
04:19 9 Your Honor, you're going to learn, among other things, that
04:19 10 Cameron was in fact the inventor of the blowout preventer back
04:19 11 in the 1920s. And since that time, BOPs manufactured by
04:19 12 Cameron have been used safely and effectively around the world
04:19 13 to control kicks and to prevent blowouts.

04:19 14 As I stand here today, there are Cameron blowout
04:19 15 preventers being used around the world by many companies,
04:20 16 blowout preventers that are using the same model, the same
04:20 17 technology and the same design as the blowout preventer on the
04:20 18 *Deepwater Horizon*. And there's good reason for that. It's
04:20 19 because, as we believe the evidence will show, the
04:20 20 Cameron-designed blowout preventer on the *Deepwater Horizon* is
04:20 21 a good and safe product. But a blowout preventer, just as the
04:20 22 name suggests, is a blowout preventer. It is not a blowout
04:20 23 stopper.

04:20 24 A BOP, as Your Honor has already heard, is
04:20 25 designed to operate in response to a kick, and that is well

04:20 1 known in the oil and gas industry. Anyone with any involvement
04:20 2 in drilling in the oil and gas industry understands full well
04:20 3 that the key to effective well control is early kick detection
04:20 4 and rapid response. Early kick detection and rapid response.

04:21 5 BP and Transocean certainly understood those two
04:21 6 fundamental well control principles, as did almost everybody
04:21 7 else in the industry. I refer Your Honor to simply two
04:21 8 documents. One is the *Transocean Well Control Manual* and the
04:21 9 second one -- if we may show it.

04:21 10 Here we go. It's the *Transocean Well Control*
04:21 11 *Manual* and then we also have the *BP Well Control Manual*. If
04:21 12 you look at what the Transocean document says, it says: "Early
04:21 13 recognition of the warning signals and rapid shut-in are the
04:21 14 key to effective well control."

04:21 15 And then if you look at BP's Well Control
04:21 16 Manual, it says -- and I'm going to refer to the bottom, in the
04:21 17 interest of time: "The blowout preventer must be closed
04:21 18 immediately."

04:21 19 Then up above it says: "BP drilling and
04:21 20 operations policy requires that the BOP be closed in the event
04:22 21 a kick is detected or suspected."

04:22 22 Early kick detection, rapid response. But it's
04:22 23 equally well understood, Your Honor, in the oil and gas
04:22 24 industry that a kick must be detected and the well must be shut
04:22 25 in with the BOP before you have a severe well condition.

04:22 1 Why is that? Because it's universally
04:22 2 recognized, and as stated in Transocean's Well Control Handbook
04:22 3 that under severe well conditions -- well control conditions,
04:22 4 failure of ram packers can occur.

04:22 5 What are packers? Packers, Your Honor, are the
04:22 6 rubber components in the blowout preventer that allow the
04:22 7 blowout preventer to actually seal the well. If they are
04:22 8 damaged or destroyed in any way, a BOP simply cannot seal the
04:22 9 well.

04:22 10 We believe the evidence will show that on
04:22 11 April 20, 2010, there was no early kick detection, there was no
04:23 12 rapid response, and there was no attempt to activate timely the
04:23 13 BOP to prevent the blowout. The evidence will show, we
04:23 14 believe, that the BOP was not activated until after gas was
04:23 15 actually above the BOP and after the well control situation was
04:23 16 actually beyond severe. In other words, the blowout preventer
04:23 17 was not activated until after the blowout had already occurred.
04:23 18 Approximately 50 minutes elapsed, Your Honor, between the time
04:23 19 the well began to flow and efforts to activate the blowout
04:23 20 preventer.

04:23 21 Now, to put the severity of the Macondo incident
04:23 22 into context, we have Transocean's well control statistics from
04:23 23 2005 through 2010. And Mr. Brian and Mr. Brock showed you
04:23 24 something similar during their presentations.

04:23 25 Next slide, please.

04:23 1 These are the Transocean kicks from 2005 to
04:24 2 2010. During that time, Transocean rigs had 409 kicks. And
04:24 3 the average kick volume before the well was brought under
04:24 4 control was 10 barrels. Transocean policy -- and it's a good
04:24 5 policy -- states that the failure to limit the kick to less
04:24 6 than 20 barrels is less than ideal. 89 percent of its kicks
04:24 7 were caught within this 20-barrel limit.

04:24 8 Kicks over 20 barrels are called *Code Red*
04:24 9 because they are critical events. Transocean had 60 of those.
04:24 10 All but five, excluding Macondo, were under 100 barrels, and
04:24 11 the largest was 200 barrels.

04:24 12 What was the size of the kick on April 20, 2010,
04:24 13 on the *Deepwater Horizon*? Your Honor, it was literally off the
04:24 14 charts. Depending on whether you use BP's estimate or whether
04:24 15 you use Transocean's estimate, the Macondo well flowed between
04:25 16 700 and 1,000 barrels before there was even an attempt to close
04:25 17 the BOP.

04:25 18 We have a few demonstratives that we believe
04:25 19 graphically show the enormity of what took place on the Macondo
04:25 20 well and the *Deepwater Horizon* on April 20, 2010.

04:25 21 Next slide.

04:25 22 This represents the average volume kick based
04:25 23 upon the history of Transocean.

04:25 24 Next we have the reasonable kick volume, which
04:25 25 is 20.

04:25 1 Then the largest kick volume in the red zone,
04:25 2 which is the critical area that I mentioned to Your Honor.

04:25 3 Well, what actually happened on the Macondo
04:25 4 well?

04:25 5 Let's look at the next slide, please.

04:25 6 That's what happened on the Macondo well. So
04:25 7 Your Honor can see the enormity of the volume before the
04:25 8 blowout preventer was even activated.

04:26 9 How did the interested parties themselves view
04:26 10 the conditions that occurred on the *Deepwater Horizon*?

04:26 11 Well, next slide, please.

04:26 12 When Transocean went before the national
04:26 13 commission, the representative -- its representative testified
04:26 14 that the event was like a 550-ton freight train hitting the rig
04:26 15 floor, followed by a jet engine's worth of gas coming out of
04:26 16 the rotary. That was Mr. Billy Ambrose, who's Transocean's
04:26 17 drilling managing director, North American division.

04:26 18 But he also went on to say: "It's like snipping
04:26 19 a fire hose with a pair of scissors. The blind shear rams were
04:26 20 not designed for that."

04:26 21 We certainly agree with that.

04:26 22 Then he goes on to say: "And that jet engine of
04:26 23 gas would have eroded away the rubber seals," the packers I
04:26 24 mentioned to Your Honor earlier, "on the blind shear rams."

04:27 25 What about BP? What did they say in their

04:27 1 accident investigation report? In BP's accident investigation
04:27 2 report, they discussed the fluid velocities that were ripping
04:27 3 through the BOP when it was finally activated and was trying to
04:27 4 close the well. It states that "According to OLGA well flow
04:27 5 modeling, the fluid velocity through a leaking annular
04:27 6 preventer could have reached levels that were orders of
04:27 7 magnitude greater than drill pipe steel erosion velocity."

04:27 8 In other words, Your Honor, velocity that could
04:27 9 actually cut steel.

04:27 10 We believe the evidence will show that by the
04:27 11 time the BOP was activated under these severe and extreme
04:27 12 conditions -- namely, a jet engine of gas moving at 10 times
04:27 13 beyond steel erosion velocity -- it was simply too late for
04:27 14 this BOP, or any BOP for that matter, to be effective. So that
04:27 15 eventually when the blind shear rams were in fact activated,
04:28 16 the extreme conditions in the well ripped apart the BOP
04:28 17 packers, making the BOP unable to seal the well.

04:28 18 Everyone knew that could happen if the BOP was
04:28 19 not activated timely, and no one in this industry can seriously
04:28 20 claim otherwise.

04:28 21 Let me mention briefly off-centered drill pipe.
04:28 22 You have already heard references to off-center drill pipe;
04:28 23 that is, the drill pipe being forced over the side of the
04:28 24 blowout preventer so that the blind shear rams could not shear
04:28 25 the drill pipe and seal the well.

04:28 1 When you listen to these witnesses who talk
04:28 2 about off-centered drill pipe -- and they're principally
04:28 3 experts -- respectfully, Your Honor, I ask you to keep two
04:28 4 things in mind: First, no two experts can agree on how that
04:28 5 pipe supposedly got to the side of the BOP. But every one of
04:28 6 their theories about how the drill pipe did get to the side of
04:29 7 the BOP depends upon extreme and unprecedented conditions and
04:29 8 forces, conditions we believe that show that those packers
04:29 9 would have been damaged regardless of the position of the drill
04:29 10 pipe.

04:29 11 The second thing we respectfully ask Your Honor
04:29 12 to keep in mind is that none of these experts can say that any
04:29 13 reasonable alternative ram design would have made any
04:29 14 difference at all under these unprecedented conditions on
04:29 15 April 20, 2010. No BOP ram could have sheared the drill pipe
04:29 16 and sealed the well under these conditions. And with respect
04:29 17 to Cameron's potential liability, that's key. If there's no
04:29 18 reasonable alternative design available at the time, back in
04:29 19 2001, there can be no design defect.

04:29 20 Let me say in a minute or so about the BOP
04:29 21 control system. You will also hear evidence about the BOP
04:30 22 control system and the batteries used to operate the automatic
04:30 23 mode function, or deadman system. That, we believe, is a fight
04:30 24 among others. And that's basically all we are going to say
04:30 25 about that other than to say the system was state-of-the-art at

04:30 1 the time in 2001 and that the evidence will confirm that the
04:30 2 system operated, everybody knew how the system operated, and
04:30 3 they knew the system's limitations.

04:30 4 To use the words of Cameron's customer,
04:30 5 Transocean, the BOP control system is a, quote, quality
04:30 6 product, end quote, and that's Mr. Geoff Boughton.

04:30 7 But no discussion about controls can change the
04:30 8 fact that there was no attempt to close the blowout preventer
04:30 9 until after the accident had occurred. Like the brakes on your
04:30 10 automobile, it does no good to apply your brakes after an
04:30 11 accident, which brings me back to where I began.

04:30 12 The parties in this case all understood that
04:30 13 this Cameron-designed BOP was used successfully for a decade to
04:31 14 control kicks on the *Deepwater Horizon*, including a kick,
04:31 15 Your Honor, six weeks before this incident. Everybody knew
04:31 16 this was a blowout preventer, not a blowout stopper.

04:31 17 Then finally, next-to-the-last slide, this is
04:31 18 what BP's key person dealing with blowout preventers said. He
04:31 19 was the one that was assigned to the BP accident investigation
04:31 20 team and principally the blowout preventer. What his notes
04:31 21 say: Blowout preventer, not blowout stopper.

04:31 22 Transocean knew it, as you will see from this
04:31 23 testimony, which takes just 30 seconds, if I may play it,
04:31 24 Your Honor, and then I'm finished.

04:31 25 This is Mr. Boughton again.

04:31 1 "QUESTION: While you were working at Michoud, did
04:31 2 you tell representatives of Cameron that it was your view
04:32 3 that a BOP is a blowout preventer, not a blowout stopper?

04:32 4 "ANSWER: Yes.

04:32 5 "QUESTION: That's a view that you hold?

04:32 6 "ANSWER: Yes.

04:32 7 "QUESTION: It's a view that you held prior to
04:32 8 April 20, 2010?

04:32 9 "ANSWER: Yes."

04:32 10 MR. BECK: Thank you, Your Honor.

04:32 11 THE COURT: Thank you.

04:32 12 M-I.

04:33 13 MR. TANNER: May it please the Court. Good
04:33 14 afternoon, Your Honor. I'm Hugh Tanner, with the firm of
04:33 15 Morgan Lewis & Bockius, and I'm here today representing in a
04:33 16 very honored the way the men and women of M-I SWACO.

04:33 17 M-I SWACO, which I will refer to you in my
04:33 18 opening statement today, was the drilling fluids contractor
04:33 19 that worked on the Macondo well, the *Deepwater Horizon* rig.
04:33 20 Now, in the world of oil and gas exploration, drilling fluids
04:33 21 are often referred to as *drilling mud*. Therefore, during the
04:33 22 course of this litigation, you'll probably come to know my
04:33 23 client, M-I, not as the drilling fluids contractor, but as the
04:33 24 mud company.

04:33 25 In the same vein, we have some very dedicated

04:33 1 individuals who've worked on the *Deepwater Horizon* rig, whose
04:33 2 job -- their employment title is drilling fluids contractor --
04:34 3 I mean, drilling fluid specialist. Similarly, in that same
04:34 4 vein, over the course of this case, you will probably come to
04:34 5 know them not as drilling fluid specialists, but as mud
04:34 6 engineers.

04:34 7 During this trial, Your Honor, you will learn
04:34 8 that the primary job performed by a mud company on a drilling
04:34 9 rig is to supply the specific drilling fluids ordered by the
04:34 10 operator, in this case BP, and then maintain those drilling
04:34 11 fluids in the condition and at the weight specified by the
04:34 12 operator. That's it. That's the role of a mud company.

04:34 13 Indeed, you will learn that a mud company does
04:34 14 not mix, it does not combine, it doesn't even open the sacks
04:34 15 that contain the ingredients, the mud, the spacers, the LCMs
04:34 16 and the other fluids it supplies. What's more, it will be
04:34 17 shown a mud company also does not pump those drilling fluids
04:34 18 into the well in which they are used. Rather, you will come to
04:35 19 know that those tasks are performed by the drilling contractor.

04:35 20 In addition, over the course of this proceeding,
04:35 21 Your Honor, you will hear from industry veterans that a mud
04:35 22 company does not design, conduct, or interpret negative tests.
04:35 23 A mud company does not design displacement procedures. A mud
04:35 24 company does not play a role in well control. It does not open
04:35 25 or close valves on the rig, and it does not read or monitor rig

04:35 1 gauges.

04:35 2 Further, Your Honor, you will learn that a mud
04:35 3 company does not operate any pumps on the rig; does not move
04:35 4 any mud between the pits or on the rig; does not measure or
04:35 5 strike, as they refer to it, any fluids in those pits; and does
04:35 6 not dump or empty any trip tanks. Instead, you will learn that
04:35 7 those tasks I just listed, some of which were the focus of the
04:35 8 opening statements earlier here today, were performed by the
04:35 9 operator, the drilling contractor, or another contractor.

04:35 10 You will also be shown at trial, Your Honor,
04:36 11 that M-I entered into a contract with BP that governed M-I's
04:36 12 provision of its drilling fluids and attendant services in
04:36 13 accordance with the scope of the work dictated by the operator
04:36 14 and at the specific direction of the operator.

04:36 15 Our people, Your Honor. On the day of the
04:36 16 blowout, M-I was not simply a mud company working on board the
04:36 17 *Deepwater Horizon* rig. No, that would not be a fair
04:36 18 characterization by any means or by any measure. Rather, the
04:36 19 Court will learn that on that day, M-I was five experienced and
04:36 20 dedicated men: Gordon Jones, Blair Manuel, Leo Lindner, Greg
04:36 21 Meche, and John Quebodeaux.

04:36 22 Tragically, two of our men, Gordon Jones and
04:36 23 Blair Manuel, lost their lives that day. Two others, Greg
04:36 24 Meche and Leo Lindner, received injuries in the blast. Indeed,
04:36 25 only one of the men for whom M-I was personified that day on

04:37 1 the *Deepwater Horizon* rig, John Quebodeaux, escaped without
04:37 2 injury.

04:37 3 So today when I stand before this Court in
04:37 4 representation of the mud company, M-I, I stand here, too, for
04:37 5 our mud engineers, the members of the M-I family working on
04:37 6 board the *Deepwater Horizon* that day: Gordon, Blair, Leo,
04:37 7 Greg, and John. It is in that representation of those men and
04:37 8 that company that I rise to make clear the record to be shown
04:37 9 to this Court regarding the work they performed.

04:37 10 Your Honor, being the last of six hours, or I
04:37 11 guess six hours and 10 minutes, we have now listened to those
04:37 12 opening statements in which counsel for each of the parties
04:37 13 rose to detail the evidence they contend will be presented to
04:37 14 the Court during trial. However, over the course of those
04:37 15 opening statements, in stark contrast to many of the other
04:37 16 defendants, or really the other defendants in total, the name
04:38 17 of my client, M-I, was mentioned one time in the six hours.
04:38 18 And there's good reason.

04:38 19 M-I, as Your Honor will learn, had a
04:38 20 distinctly -- had and occupied a distinctly different, limited
04:38 21 role on the *Deepwater Horizon* rig that in no way could have
04:38 22 caused or contributed to the tragedy that ensued.

04:38 23 Abundantly clear from the opening statements
04:38 24 this day is the inescapable conclusion that the interpretation
04:38 25 of the negative test forms a central focus of this litigation.

04:38 1 Of significance, Your Honor, however, to M-I, is the parties to
04:38 2 this litigation have all agreed that M-I played no role in the
04:38 3 negative pressure test conducted on the Macondo well. Indeed,
04:38 4 in agreed stipulations filed with this Court, the parties
04:38 5 stipulated and agreed that M-I personnel had no responsibility
04:39 6 for determining whether BP would conduct a negative test during
04:39 7 displacement. Moreover, the parties have stipulated and agreed
04:39 8 that no M-I personnel were responsible for conducting or
04:39 9 interpreting the negative pressure test on April 20, 2010.

04:39 10 In addition to discussions today surrounding the
04:39 11 negative pressure test, Your Honor was also presented with
04:39 12 statements during opening regarding the propriety of the well
04:39 13 control responsibilities exercised on the Macondo well. Once
04:39 14 again, of significance to M-I, the parties to this litigation
04:39 15 have stipulated and agreed that no M-I personnel were
04:39 16 responsible for monitoring the Macondo well for well control
04:39 17 purposes on the *Deepwater Horizon*. Nor could they have been,
04:39 18 Your Honor.

04:39 19 As you will hear at trial, M-I fluid specialists
04:39 20 are not trained in well control, since they play no role in the
04:39 21 execution of that very critical task. Indeed, as I said
04:40 22 earlier, the role of the fluid specialist, Your Honor will come
04:40 23 to learn, is to supply and maintain the drilling fluids.

04:40 24 There was also discussion in opening statements
04:40 25 today, Your Honor, regarding the use during displacement of

04:40 1 spacers. As Your Honor will hear during the course of the
04:40 2 trial, a spacer is quite simply nothing more than a fluid that
04:40 3 is used to separate two -- or create space between two
04:40 4 otherwise incompatible fluids. On the *Deepwater Horizon*, the
04:40 5 two incompatible fluids were seawater and drilling mud.

04:40 6 You will hear from drilling fluid experts that
04:40 7 the LCM spacer used in the Macondo well was well suited in its
04:40 8 composition and in its volume. Furthermore, once again, the
04:40 9 parties to this case and each and all have acknowledged that BP
04:40 10 approved the two LCM pills and the spacer used during the
04:41 11 displacement of the Macondo well to seawater.

04:41 12 In one of the opening statements this morning,
04:41 13 Your Honor, counsel intimated that the presence of spacer
04:41 14 during displacement could have affected the kill line pressure
04:41 15 flow -- or the kill line pressure or flow during the negative
04:41 16 pressure test and, therefore, in some manner, confused the
04:41 17 interpretation of the negative pressure test. To that point,
04:41 18 once again, each and every party to this litigation has
04:41 19 stipulated and agreed that the reason for the zero pressure on
04:41 20 the kill line during a negative pressure test has not been
04:41 21 definitively established. Indeed, during the course of the
04:41 22 trial, Your Honor, you will be offered testimony that the zero
04:41 23 pressure reading on the kill line could have been caused by any
04:41 24 number of factors, including a forgotten closed kill line
04:42 25 valve.

04:42 1 In addition, Your Honor, you've heard in opening
04:42 2 statements today from others and will hear again during trial
04:42 3 that there was in fact no confusion at all. The results of the
04:42 4 data gathered during the negative pressure test unequivocally
04:42 5 revealed a failed test and, therefore, a definite lack of well
04:42 6 integrity. Your Honor will hear testimony from veteran oil and
04:42 7 gas professionals, each experts in their field, that the
04:42 8 presence of pressure on the drill pipe alone mandated the
04:42 9 declaration of a failed test. Further confirmation will be
04:42 10 coming in the form of evidence that often will be offered, that
04:42 11 a buildup of pressure on the drill pipe as well in a shut-in --
04:42 12 in a system that otherwise was deemed to be shut in serves only
04:42 13 to confirm the lack of well integrity and thus, again, a failed
04:43 14 negative test.

04:43 15 Your Honor, M-I feels very strongly that the
04:43 16 agreed stipulations in this case made clear that no action
04:43 17 attributable to M-I could in any manner be considered a
04:43 18 producing cause of the blowout or the subsequent hydrocarbon
04:43 19 release, much less -- as was suggested this morning -- provide
04:43 20 any support whatsoever for a finding of gross negligence.

04:43 21 Thank you very much. We appreciate your time,
04:43 22 Your Honor.

04:43 23 **THE COURT:** Thank you, Mr. Tanner.

04:43 24 All right. We are going to recess in a minute.
04:43 25 I want to ask a couple things, first of all.

04:43 1 The plaintiffs still intend to call Dr. Bea as
04:43 2 your first witness tomorrow?

04:43 3 **MR. CUNNINGHAM:** Yes, Your Honor.

04:43 4 **THE COURT:** What's the anticipated length of his
04:43 5 testimony?

04:43 6 **MR. CUNNINGHAM:** I'm guessing in the hour-and-a-half
04:43 7 range.

04:43 8 **THE COURT:** You're talking about direct?

04:43 9 **MR. CUNNINGHAM:** Yes, sir.

04:43 10 **THE COURT:** Then your next witness after him would be
04:44 11 who?

04:44 12 **MR. CUNNINGHAM:** Mr. McKay.

04:44 13 **THE COURT:** Someone had raised the issue earlier
04:44 14 today about sequestration of witnesses. Is there a motion by
04:44 15 someone to do that?

04:44 16 **MR. STERBCOW:** Yes, Your Honor, the PSC so moves.

04:44 17 **THE COURT:** I'm going to order and instruct counsel
04:44 18 to advise all of their witnesses that they should not enter the
04:44 19 courtroom until they are called to testify; that further, they
04:44 20 should not discuss their testimony with anyone either before or
04:44 21 after they testify except for counsel, of course. They are
04:44 22 free to discuss their testimony with any of the lawyers in the
04:44 23 case, if they choose to do so. So I would appreciate it if
04:44 24 everyone gives --

04:44 25 **MR. UNDERHILL:** For clarification, Your Honor, would

04:44 1 the sequestration order include expert witnesses as well as
04:44 2 percipients?

04:44 3 **THE COURT:** No. Expert witnesses can stay in the
04:44 4 courtroom, and any representative of a party, of course, can
04:44 5 stay in. Any other witnesses -- obviously I don't know who the
04:45 6 witnesses are, so I'm going to depend on you-all to instruct
04:45 7 your witnesses and make sure they don't enter the courtroom
04:45 8 inadvertently.

04:45 9 **MR. CUNNINGHAM:** That would include the extensions of
04:45 10 this courtroom that exist?

04:45 11 **THE COURT:** Yes, of course, the overflow rooms, too.
04:45 12 When I say "the courtroom," anywhere they could hear the
04:45 13 testimony. Thank you.

04:45 14 Anybody have anything else? Everyone have a
04:45 15 good evening. We will resume at 8:00 in the morning.

04:45 16 **THE DEPUTY CLERK:** All rise.

04:45 17 (Proceedings adjourned.)

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CERTIFICATE

I, Toni Doyle Tusa, CCR, FCRR, Official Court Reporter for the United States District Court, Eastern District of Louisiana, do hereby certify that the foregoing is a true and correct transcript, to the best of my ability and understanding, from the record of the proceedings in the above-entitled matter.

s/ Toni Doyle Tusa
Toni Doyle Tusa, CCR, FCRR
Official Court Reporter

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